

DESIS NETWORK PRESENTS

AGEING, INGENUITY & DESIGN

International Cases
Collection 2015

Yanki Lee & Patricia Moore (Eds.)



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DESIS NETWORK

Ageing & Ingenuity

THEMATIC CLUSTER

Ageing & Ingenuity is the second DESIS Cluster Collective set up to investigate different design approaches that address the full spectrum of challenges around ageing. Central to this cluster is the development of design responses to the statement "ageing in itself is not a policy problem to be solved" (Bazalgette, 2011) and instead introduces "ageing as a culture to inspire social innovation" (Lee, 2012). From cognitive impairments to living in elderly care, tools for self-management and coping strategies for chronic diseases, knowledge, processes, outcomes and experience will be shared by means of an online working platform as well as offline activities such as workshops, exhibitions, and disseminated material. The aim of the project is to investigate which new services, tools, and solutions we can design together with the elderly, when thinking about our future society.

Through the lens of ageing and ingenuity, the cluster begins with three design schools (Linnaeus University Sweden, Hong Kong Design Institute and Social Spaces CUO - MAD-Faculty, Belgium) employing collaborative design tactics within a socially innovative project framework. More DESIS Labs, worldwide, are already working on Ageing and Ingenuity (A&I) and these can be connected to create a DESIS Thematic Cluster: a group of DESIS Labs working on the same theme and exchanging experiences with the aim of extending development and building original design knowledge together. Its particular focus on cultural diversity means that this Thematic Cluster will initially include representatives from different continents worldwide across various DESIS Labs.

Sara Hyltén-Cavallius, Yanki Lee and Virginia Tassinari

DESIS Network, initiated 2013

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FOREWORD

Since its establishment in 2007, the Hong Kong Design Institute has been committed to the provision of the highest quality of education for the lifespan of its individuals. The institute cultivates an ongoing quest for knowledge, professionalism, and innovation throughout the creative realm.

In this spirit, the HKDI DESIS Lab was delighted to welcome the formation and launch of the DESIS Ageing and Ingenuity Cluster in 2013. The DESIS Network, (“Design for Social Innovation towards Sustainability”), encourages and supports vital international collaborations and partnerships of design schools, corporations, foundations, government agencies, and non-profit organizations promoting social innovation and sustainability, by design.

HKDI’s “Think-and-Do” approach provides a perfect partnership for the goals of Creative Ageing. Our Students have undertaken several successful educational opportunities with Hong Kong’s elderly citizens, producing exciting self-directed solutions for everyday living: “What the Health”: Designing Personal Wellness, “Bagging You”: Design Your Bag, “Food-Step”: Designing Your

Meal, Step by Step, and the “Open Diamond Project”: Design Your Dying Matters.

The emergence of these “Co-Design” and “Participatory Design” processes empower each of us as individuals, in the creation of lifestyles enhanced by personal choice and control. By focusing on design as a consumer’s right, every aspect of our daily lives becomes a holistic celebration of autonomy.

The international collection of design-driven examples in AGEING INGENUITY & DESIGN are evidence that when encouraged and supported to create the lives of our desires and needs, we all thrive. By design, people all over the world can live happy and fulfilling social realities.

Leslie Lu
Principal

Hong Kong Design Institute
& Hong Kong Institute of Vocational
Education (Lee Wai Lee)



INTRODUCTION

She's lovingly called "Flower Granny". Playful and spry, Flower Granny began painting at the age of 80. Like American folk artist Grandma Moses, whose fabled career began at the age of 78, Flower Granny's days are full of drawing and painting beautiful blooms, transforming mundane objects of everyday life into beautiful works of whimsy. Elders like Hong Kong's Flower Granny are defining a new realm of a buoyant, self-determined late life.

Ageing, Ingenuity & Design is the first in a series of inspiring anthologies of international success stories, detailing how the elderly everywhere can enjoy a vibrant late life. With the support of dedicated design approaches, the goals of autonomy, independence and wellbeing can be achieved. This shared learning serves as a guide book for what is possible when elders are encouraged to be the directors of their destiny with creative and innovative support.

The book begins with a collection of celebrity quotations on the subject of ageing and being elderly. Some sober, others witty, this broad array of voices reminds us that growing older can be a challenge, but elderly life can be the greatest of gifts.

Disguised shares the unique true story of a New York Designer who, frustrated by the design community's failure to embrace

the consumer needs of all people as equal, prosthetically became a variety of women in their eighties and traveled for nearly four years throughout North America, learning what life is like when confronted by the exclusion of design. Coupled with Roger Coleman's design treatise, *But Will the Neighbours Be Jealous?*, a poignant review of the needs of people challenged by birth anomalies and the effects of illness and injury, the directive for the design community becomes quite clear: design for all ages and abilities is the mandate of our time.

From Genk Belgium, we are encouraged by a humane approach for design to influence the lives of people with dementia, and from Liege Belgium, where enhancing the quality of life of the elderly in the neighbourhood of Saint-Gilles is achieved by pairing the elderly with local students, transcending a wider spectrum of ages.

In Copenhagen, the diverse lifestyles of the elderly are highlighted with Project Senior Interaction. The resulting understanding of what it is to be an elder is accomplished through the stories of three compelling lives.

Transforming the aspects of everyday living, *Longevity*, is a development from the Department of Design from the Politecnico di Milano in joint venture with the Complex

Systems & Artificial Intelligence Research Center of the University of Milano-Bicocca, Italy.

A focus on late life mobility in the Netherlands is provided with CRISP, the Creative Industry Scientific Programme in Eindhoven, where researchers are using real life experiences to determine high quality of life interventions.

From Portugal, enhancing understanding about Alzheimer's Disease and bolstering personal interactions is a matter of Communication Design.

The Ageing and Ingenuity Lab, in the Design Department of Linnaeus University, Sweden, examines how immersive design can create and support higher quality lifestyles for its elderly population.

In the UK, The Geezers Club is one of five groups of older people actively involved in "Democratising Technology" and providing for enhanced life for all with appropriate design. From Newham, East London, The Resistant Sitting Project is examining the role of creative appropriation of generic streetscape objects as temporary seating.

London's Helen Hamlyn Research Centre shares twelve far-reaching projects completed in partnership with Blackberry Ltd over the last decade. Included are projects to make smart phones accessible for use by low-vision users, creation of fashionable technology and efforts to make Wi-Fi devices more inclusive.

In Japan, the collective wisdom of people over the age of 90 years has been harnessed into a collective guide of pieces of wisdom and techniques for graceful, balanced living with nature.

Beijing's Tsinghua University provides a wonderful example of retaining the insightful minds and experiences of retired professors within an academic community

and Jiangnan University, located by Lake Taihu provides an excellent example of design for the Wuxi elders of the Lihu and Shangxian communities.

The Community Senior Club in Ulsan South Korea is an excellent example of a civilian organization established by the Korean Institute for the Aged for participation in vital social activities and occupational training for the creation of employment opportunities.

From Mesquita, Brazil, the Artificers Group was formed by older women to support themselves financially and socially through the creation of lovely and unique craftworks.

The neighbourhood of Tijuca, in Rio de Janeiro Brazil features a self-organised group of retired friends, while the ever-increasing number of world events hosted by Rio de Janeiro presents its elder residents with an opportunity to provide "domestic hospitality" for visitors from around the world.

And finally, a collaboration between Art Center College of Design in Pasadena California, with Tama Art University in Tokyo Japan addresses the opportunities of ever-increasing elder societies around the world.

The breadth of global experiences and success presented in this edition of Ageing, Ingenuity & Design serves as inspiration for what can and will be achieved in a future rich with the diversity of solutions that are made possible with creativity, innovation and design.

Yanki Lee PhD

Director

DESIS Lab for Social Design Research
Hong Kong Design Institute

Patricia A Moore PhD

President

MooreDesign Associates USA



101 QUOTES ON AGEING

'A comfortable old age is the reward of a well-spent youth. Instead of its bringing sad and melancholy prospects of decay, it would give us hopes of eternal youth in a better world.'

—Maurice Chevalier, Actor

'Men are like wine – some turn to vinegar, but the best improve with age'

—Pope John XXIII

'There is a fountain of youth: it is your mind, your talents, the creativity you bring to your life and the lives of people you love. When you learn to tap this source, you will truly have defeated age.'

—Sophia Loren, Actress & Humanitarian

'Old age is not a disease
– it is strength and
survivorship, triumph over
all kinds of
vicissitudes and
disappointments, trials
and illnesses.'

–Maggie Kuhn,
Founder of the Grey Panthers,
Elder Activist

'Age appears to be best
in four things; old wood best
to burn, old wine to drink,
old friends to trust,
and old authors to read.'

–Francis Bacon

'Old age is like a plane flying through a storm.
Once you're aboard, there's nothing you can do.'

–Golda Meir, Prime Minister of Israel

'We don't stop playing
because we grow old;
we grow old because
we stop playing..'

–George Bernard
Shaw, Playwright

'May you live
to be one
hundred years,
plus one to
repent.'

–Irish blessing

'An archaeologist
is the best
husband a woman
can have.
The older she gets
the more interested
he is in her.'

–Agatha Christie,
Anthropologist

'I want to get old
gracefully. I want to have
good posture.
I want to be healthy and
be an example to
my children.'

–Sting, Musician & Humanitarian

'A man
growing old
becomes a
child again.'

–Sophocles, Ancient
Greek Dramatist

'Old age, believe me,
is a **good** and **pleasant**
thing. It is true you are
gently shouldered off
the stage, but then
you are given such a
comfortable front stall
as spectator.'

—Confucius

'Age is not a
particularly
interesting
subject. Anyone
can get old.
All you have to
do is live long
enough.'

—Don Marquis,
Philosopher

'One of the many things nobody ever tells you about
middle age is that it's such a nice change from being young..'

—William Feather, Author & Publisher

'The secret
of genius
is to carry
the spirit
of the child
into old
age, which
mean never
losing your
enthusiasm.'

—Aldous Huxley,
Writer

'When granted
many years of life,
growing old in age
is natural, but growing
old with grace is
a choice. . '

—Billy Graham, Minister

'Age merely
shows what
children
we remain.'

—Johann
Wolfgang von
Goethe, German
Writer &
Statesman

'We are always the same age
inside.'

—Gertrude Stein, Writer & Playwright

**'The harvest of old age is the
recollection and abundance of blessing
previously secured.'**

–Marcus Tullius Cicero, Ancient Roman Philosopher & Politician

**'Age is a
case of
mind over
matter.
If you don't
mind,
it don't
matter.'**

–Satchel Paige,
Baseball Player

**'What
though
youth gave
love and
roses, age
still leaves
us friends
and wine.'**

–Thomas
Moore, Poet &
Songwriter

**'Age does not protect you
from love. But love, to some extent,
protects you from age.'**

–Jeanne Moreau, Actress & Director

**'Age and size
are only numbers.
It's the attitude
you bring to
clothes that
make the
difference.'**

–Donna Karan,
Fashion Designer

**'Youth cannot
know how age
thinks and feels.
But old men
are guilty
if they forget what it was
to be young.'**

–J. K. Rowling, Writer

**'Sometimes
I think it
would be
easier
to avoid
old age, to
die young,
but then
you'd never
complete
your life,
would you?
You'd never
wholly
know you.'**

–Marilyn
Monroe,
Actress

'The whole business of marshaling one's energies becomes more and more important as one grows older.'

—Hume Cronyn, Actor

'He who is of calm and happy nature will hardly feel the pressure of age, but to him who is of an opposite disposition youth and age are equally a burden.'

—Plato, Philosopher & Mathematician

'Loving someone liberates the lover as well as the beloved. And that kind of love comes with age.'

—Maya Angelou, Author & Poet

' Old age comes on suddenly, and not gradually as is thought.'

—Emily Dickinson, Author

'I hate the idea that you shouldn't wear something just because you're a certain age.'

—Miuccia Prada, Fashion Designer

'People who refuse to rest honorably on their laurels when they reach retirement age seem very admirable to me.'

—Helen Hayes, Actress

'I think your whole life shows in your face and you should be proud of that.'

—Lauren Bacall, Actress

'Age is whatever you think it is. You are as old as you think you are.'

–Muhammad Ali, Boxer & Humanitarian

'No one can avoid ageing, but ageing productively is something else.'

–Katharine Graham, Publisher

'May you live as long as you want and never want as long as you live.'

–Irish blessing

'Age is the acceptance of a term of years. But maturity is the glory of years.'

–Martha Graham, Dancer & Choreographer

'You can live to be a hundred if you give up all the things that make you want to live to be a hundred.'

–Woody Allen, Actor, Comedian; Filmmaker

'I'm not afraid of ageing.'

–Shelley Duvall, Actress

'Age is just a number, and your talent will never fail you. It has no expiry date.'

–Madhuri Dixit, Actress

'I'm much more open to being a supporting actor right now. At the age of 60, I'll be second fiddle. Fine. I'm happy to do it.'

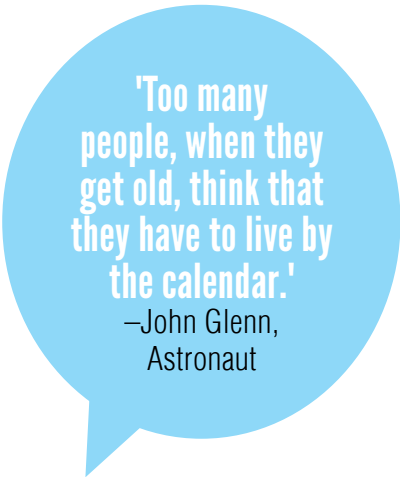
–Robin Williams, Actor, Comedian & Humanitarian

'Old age isn't so bad
when you consider
the alternative.'

—Maurice Chevalier, Actor

'One of the
stereotypes I see
breaking is the
idea of ageing
and older
women not being
beautiful.'

—Annie Leibovitz, Photographer



'Too many
people, when they
get old, think that
they have to live by
the calendar.'

—John Glenn,
Astronaut

'Forty is the old age of youth,
fifty is the youth of old age.'

—Hosea Ballou,
American Theologian

'I was brought up to respect my elders, so now,
at 90, I don't have to respect anybody.'

—Hume Cronyn, Actor



'I have reached
an age when,
if someone tells me
to wear socks,
I don't have to.'

—Albert Einstein,
Physicist

'Age is how we determine
how valuable you are.'

—Jane Elliot, Educator

'When I turned 60,
it didn't bother me at all.'

—Yoko Ono,
Artist

'Ageing has a wonderful beauty and we should have respect for that.'

—Eartha Kitt, Actress

'Age wrinkles the body. Quitting wrinkles the soul.'

—Douglas MacArthur, General

'Ageing is not lost youth but a new stage of opportunity and strength.'

—Betty Friedan, Author & Feminist

'I work out of love for God and I put all my hope in Him.'

—Michelangelo, Artist & Sculptor

'I'm not an ageing gracefully type. But, I do believe in ageing with grace.'

—Danielle Steel, Novelist

'Age is something that doesn't matter, unless you are a cheese.'

—Luis Bunuel, Filmmaker

'I am optimistic. But I also know that, with time, I'm beginning to fight issues of ageing as well as long-term paralysis.'

—Christopher Reeve, Actor

'I love ageing. Why would I want to be 21 for the rest of my life?'

—Zoe Saldana, Actress

**'I think I'm ageing,
but I'm enjoying the process.'**

–Sharon Stone, Actress

**'How old would
you be if you
didn't know how
old you was?'**

–Satchel Paige,
Baseball Player

**'Ageing is not one process. It's many
different things going on that cause
us to age. I have a program that
at least slows down each of these
different processes.'**

–Kay Kurzweil, Inventor

**'Knowing
how to age
and not being
afraid of ageing
is very
healthy.'**

–Evelyn Lauder,
Businesswoman &
Philanthropist

**'I don't want to get to the
end of my life and find that I just
lived the length of it. I want to have
lived to width of it as well.'**

–Diane Ackerman,
Author & Naturalist

**'The public
is absolutely
fascinated by
ageing. They don't
want to get old.'**

–Cynthia Kenyon,
Biologist

**'I am not afraid
of ageing, but
more afraid
of people's
reactions to
my ageing.'**

–Barbara Hershey,
Actress

**'Education
is the best
provision
for
old age.'**

–Aristotle,
Philosopher

'How do I
confront ageing?
With a wonder
and a terror.
Yeah, I'll say that.
Wonder
and terror.'

—Keanu Reeves,
Actor

'Beautiful young people are
accidents of nature, but beautiful
old people are works of art.'

—Eleanor Roosevelt,
First Lady & Humanitarian

'At 20 years of age the will **reigns**; at 30
the **wit**; at 40 the **judgment**.'

—Benjamin Franklin, Politician, Publisher & Scientist

'The trick is
growing up without
growing old.'

—Casey Stengel,
Baseball Player

'I've often
thought that
the process of
ageing could
be slowed
down if it had
to go through
Congress.'

—George Bush Sr,
President

'I don't know
how you feel
about old
age, but,
in my case,
I didn't
even see it
coming.
It hit
me from
behind.'

—Phyllis Diller,
Comedian

'Women are
not forgiven for
ageing. Robert
Redford's lines of
distinction are my
old-age wrinkles.'

—Jane Fonda, Actress

'We are
always the
same age
inside.'

—Gertrude Stein,
Writer

'The older
I grow the more
I distrust the
familiar doctrine
that age
brings wisdom.'

Henry Louis Mencken

'Such to me is
the new image of ageing:
grow in self
and service for all
mankind.'

—Ethel Percy Andrus

'I don't believe
one grows
older. I think
that what
happens early
on in life is
that at
a certain age
one stands still
and stagnates.'

—TS Eliot,
Playwright &
Poet

'The older I get
the better
I used to be.'

—Lee Trevina,
Golfer

Ageing
seems
to be
the only
available
way to live
a long live.

Kitty O'Neill
Collins

'Anyone who stops learning is old,
whether at twenty or eighty.'

Henry Ford, Industrialist

'As a white candle
in a holy place,
so is the beauty of
an aged face.'

—Joseph Campbell,
Author & Philosopher

'You are as young as
your faith, as old as
your doubt;
as young as your
self-confidence,
as old as your fear;
as young as your hope,
as old as your despair.'

General Douglas MacArthur

'Age is an issue of mind over matter. If you don't mind,
it doesn't matter.'

—Mark Twain, Writer

Life is a
moderately
good play
with a
badly
written
third act.

Truman Capote,
Writer

Any fear
of ageing
is simply
vanity.

Leighton
Meester,
Actress

'I get all fired up
about ageing in
America.'

—Willard Scott,
Television
Presenter

'Ageing can be fun if you
lay back and enjoy it.'

—Clint Eastwood, Actor

'There's a vintage
which comes
with age and
experience.'

—Jon Bon Jovi,
Musician

'A man
is not old
until regrets
take the place
of dreams.'

—John Barrymore,
Actor

'A woman has the age
she deserves.'

—Coco Chanel, Fashion Designer

'Old age and the passage of time
teach all things.'

—Sophocles,
Ancient Greek Dramatist

'I'm partly obsessed by ageing **gracefully**.'

—Dave Matthews, Musician

'The years
teach much
which the days
never knew.'

—Ralph Waldo
Emerson, Writer

'Old age ain't
no place for
sissies.'

—Bette Davis,
Actress

'With age
comes
common sense
and wisdom.'

—Nas, Rapper

'Ageing has been
bad ever since
we figured out
it led to dying.'

—Erin McKean,
Lexicographer

'Do not regret
growing older.
It's a privilege
denied to many.'

—Unknown

'Old age
is fifteen
years older
than I am.'

—Oliver
Wendell
Holmes,
Jurist

'You are not grown up until
you run out of birthdays.'

Camille, Age 7

'Keep on rageing to stop the ageing!'

—Dale Carnegie

'Age is just
a number.
Mine is
unlisted.'

Unknown

'It's important
to have a
twinkle in
your **wrinkle**.'

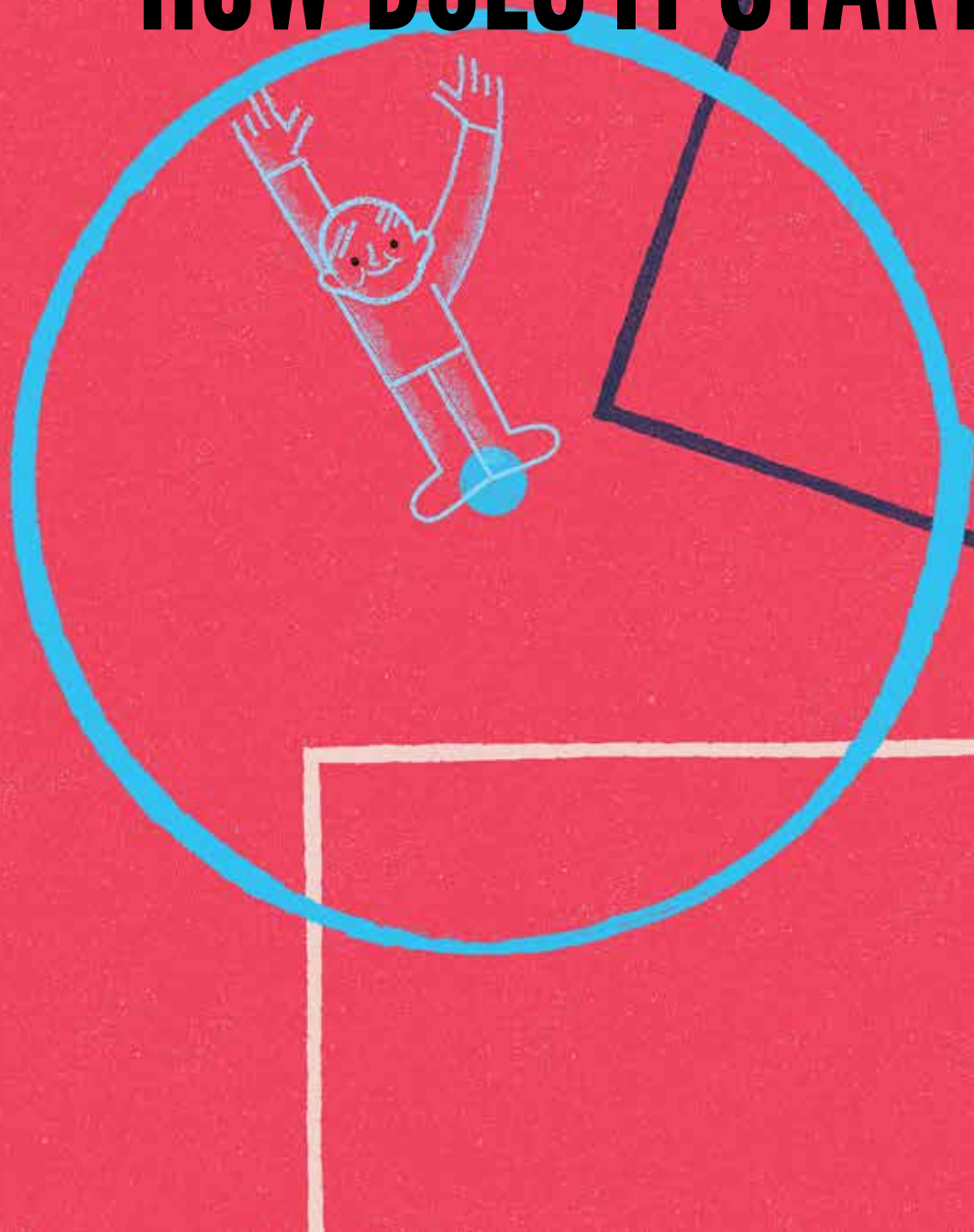
—Unknown

'Age is a matter of feeling, not of years.'

—Washington Irving, Author & Historian

PART I:

DESIGN & AGEING HOW DOES IT START?



Chapter 1

DISGUISED: THE TRUE STORY OF A DESIGNER'S QUEST TO EMBRACE AND ELEVATE ELDERS WITH EQUITY

By Patricia A Moore

Why Design is Essential for Quality Ageing

Having the great luxury of traveling throughout the world for my work, I've experienced the lifestyles of a wide array of countries and cultures. The single thing I always find most fascinating when I am immersed in a community, witnessing people's daily activities, enjoying their conversation, their meals, and their hospitality, is that we are, all of us, very much the same in our desire to be

respected, to be of value, and to be loved. While dress, food, language and more may differ, globally, all peoples share the same needs and dreams. Just as snowflakes, with no two of us exactly alike, our uniqueness is what we have in common and share for every year of our lives.

The distinctions of family structure, levels of finance and health, and the homes



in which we live define the quality of our individual lives. When the delicate balance of the trilogy of people, places and products appropriate to meeting and sustaining the requirements of daily living are achieved, we have a quality lifestyle. Disrupt or remove reasonable support from any of these vital elements and life as we wish it will be at risk.

As we age, we develop our individual cognitive, physical and social skill set, obtaining the abilities that allow us to manage our life tasks. In tandem with other possible social status changes in later life, we will experience normative changes to our physical and mental capacities, as well as alterations to our level of health from chronic conditions and acute illnesses.

The abilities of our youth eventually diminish or vanish as we grow older and the remaining level of capacity will define what

we are and are not able to achieve. Without adequate compensation for the reduction or elimination of our individual abilities, autonomy and independence are challenged. The key to achieving, managing, and maintaining the highest quality of life for the entirety of our lifespan is thereby a critical matter for design.

Imagining Life as an Elder

New York City, as with every major metropolis, presents distinct challenges for daily living. Expensive and limited housing stock disappoints first time buyers from finding residences in popular neighbourhoods and close to places of work and force lifelong residents to leave beloved homes as the costs of maintenance surge. Busy shops and restaurants translate to long waits and queues for service and premium prices. Crowded, noisy streets combine with the frustrations and uncertainty of mass transit modes that affect residents of all ages.

Now imagine you are an elder, having managed the routine of traveling from your flat to your place of employment, to the market, or a night at the theater, for decades. You've made your way through every season, type of weather and time of day. For an evening out, alone or in the company of a partner or friends, you've squeezed onto crowded buses and trains, or paid a premium for a taxi hundreds of times.

But now, in your eighth decade, your capacity and experience to manage and maintain your routine is complicated by lowered vision and hearing, reduced strength and stamina, and a painful recognition that people are not always kind to a person in need.

Witness the circumstance of such a person: the bus pulls away from the curb, lurching with sudden acceleration and forcing the standing passengers to assume a defensive stance. Strong



hands tighten on the overhead straps or clutch poles and seats to steady their bodies from the erratic motion of the carriage through the midday traffic.

A woman sits on a seat reserved for the “Elderly and Handicapped.” She appears to be in her eighties, with grey hair, wrinkled skin, and bent body. White gloves cover her hands that hold a well-worn purse and a simple pine cane. In anticipation of the upcoming stop she begins to prepare, carefully arranging her legs and searching for a way to stand.

A young man in business garb recognises the woman’s dilemma and adjusts his briefcase under his elbow so that he can free a hand to hold the woman’s arm and lift her gently from the seat. Once she is standing, the kind stranger holds her in place as the bus stops at the curb with a screeching halt.

Again, the other passengers anticipate the harsh motion and the woman is supported by the strength of the young man. She takes a deep breath as her foot strains to reach the first

stair to exit. Cautiously, she slowly manages to descend and step onto the sidewalk. By the time she turns to thank the gallant young man, the bus has pulled away.

The Evolution of Design as Equaliser

Resigned, the woman places her foot on the roadway, sighing with the realization that there is no one to help her now. Crossing the street frightens her. Last year, one of her friends was struck in that intersection and later died of the injuries she sustained. Drivers, it would seem, expect pedestrians to move quickly and with agility. Her friend could not. The woman fears the same fate.

Even with a full light cycle, the woman trembles anxiously, unable to reach the opposite curb in time. A driver inches toward her impatiently and screams as he passes, “Get outta da way, ya ol’ bag!” The woman’s eyes fill with tears at the sound of his voice. She is doing her best.

The key to achieving, managing, and maintaining the highest quality of life for the entirety of our lifespan is a critical matter for design.

Her apartment is three blocks away from the bus stop. She thinks, as she walks, of the days when she was spry. Then, it was as if her feet barely touched the pavement as she raced home to start cooking dinner for friends or change her clothes for a date. Now the trek is an arduous journey requiring nearing an hour's time.

When at last she appears at her door, there is the challenge of grasping the handle and pulling the plate glass and steel frame ajar, while balancing precariously on the stoop. Once, she had leaned too far in her effort and fallen like an oak to the ground. One more fear; one more concern.

Safely inside of the building, she moves towards the staircase. There are four landings to be conquered. Some days, she just didn't have the strength. Relying on the handrail, she pulls her body step by step up the stairs. By the first landing, she is breathless, but she

taps her reserves and laboriously climbs the remaining steps.

The door to her apartment presents one last test. She fumbles with the latch on her purse as her cane falls to the floor. She doesn't bother to notice, concentrating only on retrieving her keys. The proper key at last in her hand, she carefully directs it into the cylinder and turns the lock open. Returning her keys to her purse, she places her hands around the doorknob and strains to turn it. She winces as a sharp stab in her fingers forces her to release her grip. Closing her eyes, she grasps the knob again and finally succeeds in opening the door.

She inches her way into the apartment, pushing her fallen cane along the floor with her foot. Safely inside her home, she leans against the open door and lets the weight of her body push it closed. Turning the lock, she gasps. That pain again. Every bone in her body ached. Each muscle groaned. "Even my hair hurts today," she whispered, resigned, but not bitter.

When at last she collapses into her favourite chair, a soft, brocade throne, she smiles to herself. Another day. Looking into the mirror that hangs on the wall in front of her, she stares silently as she as she struggles to remove the white gloves from her hands. Her bandaged fingers reach for her face. She strokes her cheek and removes the pin from her hat. Slowly, she pulls the wig from her head, revealing a mound of chestnut hair. Pulling tape away from her fingers, they move freely now. Carefully, she finds an edge of skin at the line of her hair and forehead and begins to peel it from her face.

Layer after layer, she sheds her skin like a snake in the desert sun, until at last the face in the mirror is that of a woman of twenty-

People with “special needs” were not the business of mainstream design, they argued.

six years. Her skin is bruised and sore. Blood collects around the delicate skin on the sides of her nose. Turning her attention to her dress, she opens its zipper and bends towards her ankles to untie the orthopedic shoes. Next, she removes the heavy support hose, exposing elastic bandages. Removing the metal clips, she quickly unwraps her legs. Small splints of balsa wood fall from behind her knees to the floor. She reaches inside the dress and begins to remove cotton batting from the brace that encircles her chest. Slipping the dress from her shoulders, she unbuckles the brace.

Freed from her shell, the woman stands quickly. Pain stabs her lower back and right hip. She falls back into the chair. Young again, but still the pain. Both bodies, both frames share the same pain. A vicious beating at the hands of a group of young muggers the year before had resulted in chronic agony. When the thugs surrounded her to begin their attack, they had no idea that their victim was not what she appeared but a young woman living in the shell of an elder. Their violence affected both women equally.

After a hot shower and a long night's sleep, the young woman rises and dresses for work. Arriving at her office, she is met with a pile of unanswered telephone messages and a stack of unopened mail. Her secretary stands behind her and asks, “You did it again, didn’t you?” The woman nods yes. I was that woman.

The Empathic Model of Ageing for Exemplary Lifespan Design

In 1979, as the only female industrial designer at Raymond Loewy’s New York City offices, I was often frustrated in my efforts to promote design solutions that met the requirements of all consumers, as equals. Whenever a project was in development and I raised the issue about the level of usefulness for someone who “saw” with their fingertips, “walked” with a wheelchair, or “heard” with their eyes, I was told that we didn’t design for “those” people.

As a product designer, responsible for the conceptualization and production of appliances, furnishings, modes of transportation and the tools of communication, my desire was to create equity for “those” people, consumers labeled as “disabled”, a term I vehemently reject as erroneous. I abhor the failure of design to view every individual as equal in his or her right for the highest quality of life, by design.

My efforts to address the needs of so-called “fringe” consumers, so-called because of the physical and psychological challenges they faced each day, was met with dismissal by my colleagues. People with “special needs” were not the business of mainstream design, they argued. I insisted that the very survival of these individuals bordered on phenomenal, considering the lack of design attention and support. People who dealt with the effects of birth anomalies, chronic conditions and

the results of injury had been rejected by the dismissive attitudes of those not so affected.

“Those” people are all people. Some of us are shorter than others; some are taller. Some of us are weaker; some are stronger. Some of us deal with illness, injury and pain; some of us are healthier. But none of us deserve to be relegated because of our physical and mental condition to anything but the best of design.

“Those” people, as if the world could be divided into disparate groups of “them” and “us”, “normal” and “abnormal”; “regular” and “irregular”. I insisted that the very survival of these individuals bordered on phenomenal, considering the lack of design attention and support. People who dealt with the effects of birth anomalies, chronic conditions and the results of injury had been rejected by the dismissive attitudes of those not so affected. So outrageous was the declaration that “those” people weren’t part of the charter for design that I challenged the blatant discrimination and separatism with an “empathic experience” that has defined my life as a designer.

When I set out on a journey into my future, I determined to explore life as it might be for a woman in her eighth decade, a woman changed by her life’s experiences; a woman changed by time. Utilising prosthetics which reduced my abilities as a woman, then twenty-six years of age, in conjunction with a molded face and outwardly appearances of a full range of health and socio-economic levels, from homeless to wealthy, I was catapulted into the future. I became women who appeared to be more than eighty years of age.

In these guises, I travelled to one hundred and sixteen cities throughout the United States and Canada, learning first-hand, how it felt to be perceived as an elder in a youth-

obsessed culture and as someone who dealt with physical limitations in a wellness-oriented world. Each day I faced the dilemma of being made “not able” by the things that surrounded me, by the environments in which I was forced to exist, and most important, by the impatience and ridicule of those who rejected me because of what they viewed as my failures, due to my advanced age and reduced abilities.

As an elder, every minute of my day was filled with the same activities and actions, challenges and chores that any of us accomplish and confront, at any age. I rode every form of mass transit, including a hydrofoil, ate in modest coffee shops and in grand restaurants. I went to movies and the theater. I made friends. I lost friends, to illness and death. I laughed. I cried. I was treated kindly and very cruelly. I was short-changed by unscrupulous clerks and over-changed by caring cab drivers.

When I was in the character of a wealthy matron, I was treated with exceptional deference, even while I was rude and outrageously demanding. When I lived as a homeless bag lady, I was frequently denied the dignity of utilising a café’s toilet and made to urinate in the relative privacy of park bushes. I don’t believe that my apparent age was the driver with these two social extremes, but rather it was the presence or absence of wealth that determined how people interacted with me. This is a sad, but true indictment on our society’s values.

When I was dressed in the guise of a middle-income woman, someone who resembled my Grandmother, I experienced the truest reactions to my apparent age and level of ability. Sometimes people were very kind and gracious, assisting me in shops, helping me board a bus safely, or exchanging pleasantries

on a street. But just as often, people ignored my quiet requests for help and treated me rudely, if they engaged with me at all.

After nearly four years of living as elders, I re-emerged as my younger self, convinced that a goal of “universality” in design was the mandate of our time. By creating a consumer existence that celebrated individual capacity with inclusive solutions for the lifespan, design could be celebrated as the life force it is meant to be.

Recognising that every person has a level of ability is the primary directive of design. It is the designer’s mission to accommodate individual abilities with solutions that embrace every individual’s needs.

Until that time, and as long as manufacturers and politicians mollify themselves, dismissing the ever-growing mass of people deliberately made unable, we will all exist as the potential victims of inadequate and discriminatory design. Not only is now the time for lifespan design inclusivity and universality, it is the only reason for design.

The Evolution of Design as Equaliser

Perhaps it was the circumstance of its birth that gave product design its negative positioning and sense of mere fashionable consumption? Borne out of an era of economic chaos in the 1930s, its primary objective was for the promotion of goods.

Whether people really needed them or not, by design, we led consumers to believe that they couldn’t live without the “thing” of the moment. Industrialization and mass production provided for price points that drove the new consumer culture, replacing a global agrarian sensibility and tradition.

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“Humanism” in design didn’t occur until after the catastrophic wars of the twentieth century. Battlefield medical attention resulted in thousands of survivors of injuries that would have meant certain death a century earlier. Now, men were returning to their homes without the ability to care for themselves and their families and the need for compensatory design was born.

In the 1960’s, the push for “accessible architecture” led to an international drive for the creation of public spaces that supported the use of canes, walkers, zimmer frames, and wheelchairs. Recognising that some people found staircases roadblocks to their safe passage, architects and designers began to apply solutions that addressed all people as equal in their right to access and enter places of business, community spaces and public offices. “Accessibility” became a standard in design.

A decade later, architects and designers combined forces to re-evaluate accessible environmental design and expanded the effort with the promotion of usability of spaces and the features they included. In 1972, while a student at the Rochester Institute of Technology, I developed a “Universal Housing Complex Concept” that accommodated residents of all ages and abilities. Architect and activist Ron Mace was also pushing for the same holistic approach

to “design for all”. Together with pioneering gerontologists M Powell Lawton and Paul Gordon Windley, we joined forces with other early proponents to lead the change in attitude and focus that saw all consumers as equal in their rights for exemplary design.

By 1980, the American and European design communities were aggressively encouraging the normalization of embracing all people as equal, by design. With the addition of journalistic support and increased public awareness of the potential and the responsibility of the design community to address individual needs, governments joined in the effort by mandating regulations and standards that ensured equality by design.

The Americans With Disabilities Act was enacted in 1990, prohibiting discrimination against people with disabilities in employment, transportation, public accommodation, communications, and governmental activities. Expansion of the ADA’s mandate also established accessibility requirements for telecommunication equipment and products. Additionally, the Architectural and Transportation Barriers Compliance Board, often referred to as The Access Board enhances the ADA with guidelines that ensure public buildings, facilities and transit vehicles are accessible and usable by people of all abilities.

Global Opportunities for Quality Ageing by Design

The appropriateness of innovative research and design for the lifestyles of older consumers presents opportunities for large and small companies alike. In product development, positioning, promotion, and retailing, the goal should be one of creating choice in meeting needs.

In the fields of telecommunications, transportation, housing, and home appliances, an alliance with interactive technologies, new materials and emerging capacities for delivery systems presents exciting opportunities for growth. Ageing, from a consumer perspective, need no longer be associated with loss and less.

At present, perhaps the greatest cause of misunderstanding older people as consumers is a failure to view them as members of a family and community. As the senior generation, our elders represent a vast collective knowledge and experience. Linked with people of fewer years and encounters, the older person can provide enrichment and enlightenment.

Our mobile society has created intolerable separation of families. Children deprived of the delight of frequent contact with their grandparents reap enormous benefit from relationships with pseudo-grandparents. The child who views an elder with respect and appreciation will become an adult capable of the same response. The quality of our lives in the future will be determined to a great extent by the value system formed by our children today. Businesses need not merely support this critical relationship. They can chart its course.

Intergenerational efforts don’t stop with grandchildren. Adult children of older consumers are in a position to recognise their parents’ needs and are eager to respond. Major lifestyle changes, such as relocating in retirement, or selling a home and purchasing an apartment, often occur with the prompting of the mid-life child concerned about a parent’s security and welfare. Generations acting with and on behalf of each other produce lifespans of quality.

An Action Plan for Ageing Design

The combination of a global view of an ageing society with recognition of the eclectic personality of our highly heterogeneous elder population offers tremendous opportunities for businesses of all scopes. Creating an “Action Plan” to accomplish the goal of not only meeting, but exceeding the needs and wishes of consumers for the entirety of their lifespans is the starting point for success:

- **Review and Re-Position Existing Products and Services:** Capitalize on known resources and strengths. In-house capabilities and efforts redirected to emphasize inclusion of the older consumer will automatically increase sales and quality of services. Include consumers of all ages and abilities in advertising and promotional campaigns. Remember that Grand Parents delight in buying gifts for their Grand Children and typically assist their adult children with purchases that they view as luxuries. A failure to recognise the buying power of older consumers, on behalf of their families is a significant error in the marketing plans of companies of all sizes.
- **Adapt Existing Goods and Services:** Recognise the limitations that render product lines, graphics, packageing and service offerings inadequate or inconvenient for older consumers. Making appropriate adjustments by adding features that address a full range of consumer abilities will broaden the appeal of product lines and increase sales. Designing for the needs of late life addresses critical needs and coincidentally makes product use by younger and more able consumers easier and more comfortable.
- **Research and Develop New Goods and Services:** Support a campaign to leverage technology and creativity to address the emergence of consumer items that meet the challenge of graceful ageing and quality of life at any age. Be mindful of meeting the needs of elders by providing environmental and product solutions that can be utilised by their care-givers. The adult children of elder parents are eager to provide for safe and useable homes and independent lifestyles. The Baby Boomer Cohort is especially aware that by supporting technologies that allow their parents to “age in place”, providing for compensatory means to stay in the home of their choice, they are afforded the double advantage of assistance with maintaining their parents’ quality of life while assuring that they will be second-generation beneficiaries of the effort.
- **Train Sales and Service Personnel In Ageless Communication Skills:** Negative reactions to older people in retail settings or at call centers are often the result of a sales person’s inherent bias, fear of growing older, or misconception of an elder’s needs and capacities. Establishing guidelines, skill-building supports and standards tailored to providing equality for all consumers to benefit from the range sales and services will provide for higher profits and long-term corporate growth.
- **Establish Companies that Celebrate Older Consumers:** Sponsor advocacy campaigns, community events, and R&D that support the inclusion and presence of consumers of all ages and ability levels for appropriate links to company offerings. Including elders and a full of array of consumers in

product and service development with advertising campaigns that demonstrate all consumers as desirous will resonate with the primary consumers, as well as their family and friends. Create Senior Advisory Boards: Utilise older consumers within specific communities to advance research, development and marketing for corporate and not-for-profit entities. Their experience and voice will enhance all efforts and offerings and assure exemplary outcomes and equality by design.

Final Thoughts for Exemplary Design for the Future Today

A few years ago, I was honored to present for the annual “Syracuse Seminar on Ageing” at Syracuse University in New York State. Janet Wilmoth, Director of the Syracuse University Ageing Studies Institute and I had the opportunity to discuss the need for ability-based design, and ageing in America. She asked me to reflect on the incredible experiences I have had in my career and my vision for the future of ageing and design. It is my pleasure to repeat that response as a closing reflection on my quest to embrace and elevate the quality of life of all elders, by design:

I believe that we will see a much more integrated, community-based array of housing options in place, within the next twenty years. The rapid development of “Naturally Occurring Retirement Communities” [NORCs] are revitalizing towns hit hard by the housing crisis and it has become a win-win for areas with vacant real estate that can be repurposed and support the need for community-based assisted living opportunities. I also trust that mass transit solutions will include more “door-to-door” services and that automotive engineering will support safer and more

utilitarian designs that can be utilised well into late life and address the needs of people who cannot access other modes of transport.

I think architects, designers and engineers will continue to develop lifespan concepts that meet the needs of individuals, as well as extended families, and their communities, providing for a high quality of life, with ample choices and options for all levels of health and wealth.

We are already witnessing a more accepting and natural view of ageing, thanks in great part to what I like to call the “Betty White Effect”. It is remarkable that one actress has had such a significant impact on the view of positive ageing. With more and more of these examples, I hope that we will eventually reduce or stop our current level of “nipping, tucking, and lipo-sucking” and embrace natural ageing as acceptable and beautiful. While I am grateful that we have medical interventions that can restore our faces after catastrophic injuries, I find it quite disturbing that we are encouraged to cut up our bodies into someone else’s view of beauty.

It is certainly time for all of these considerations and more, for us to listen not just to our heads, but also to our hearts, as we design and build for the future, today. Using inclusivity as our mantra and our mandate, I am certain that we can create opportunities and solutions for all people, as equals.

There is no person who deserves to come to life’s end without joy, without the knowledge that they’ve made a difference, and that they count. I know that it is by design, with each of us providing not only for ourselves but for each other, that we can achieve what today might appear as a utopian dream. ■

Chapter 2

BUT WILL THE NEIGHBOURS BE JEALOUS?

By Roger Coleman

Happy Birthday Roger!

I begin this chapter on my birthday, March 20th 2014. Today I am 71. Beyond my biblical three score years and ten and without a doubt a subject for my own research. According to Shakespeare (*As You Like It*, Act 2, Scene 7) I should be in my “...second childishness and mere oblivion, Sans teeth, sans eyes, sans taste, sans everything” – when I am perfectly able to write this chapter, and cycle up mountains for fun. I do not conform to the many stereotypes of ageing, like the cartoon characterisations of bent grey figures clutching sticks that we see on road signs in the UK and are used widely in Asia, or the comic grumpy characters in popular TV and radio programs. Instead I am working on keeping fit and getting on with the rest of my life, as a photographer amongst

other things. Not only are these parodies wrong, they are deeply insulting and a gross misrepresentation of an important, valuable and rapidly growing sector of the population.

Older people cannot be lumped together as a single group of 60 plusses or 65 plusses, as marketers do on a regular and patronising basis. In reality, as we get older we become more, not less, diverse, and harder to categorise. It is young people who are conformist, who have similar lifestyles and tastes, not older people. As we get older our diverging life-courses and accumulating experiences take us in many different directions. Nothing like the stereotype that I came across a few years ago, when cycling through our village. I was intrigued



by a sign on the roadside and stopped to photograph it. The sign said 'Happy 40th Roger...' and I thought "What fun for that man's kids to celebrate his birthday so publically," until I saw another sign at right angles to it with a more ominous message... "No more squash and tennis, carpet bowls and dominoes from now on! Roger, park your invalid carriage here."

My Invalid Carriage!

The 21st century reality is very different. We all have a much longer and on the whole healthier life to look forward to than a century ago. The problem is that the change is very recent, preconceptions about ageing are decidedly out of phase with reality and social attitudes have a lot of catching up to do.

Population Ageing

Population ageing is a relatively new fact of life, first manifest in the UK from the beginning of late 18th century and in all probability triggered by the Industrial Revolution. From the earliest records and up until that time no more than one in ten of the UK population was aged over sixty, and life expectancy was less than 40. In 1991, in the UK, one in three adults was over 50, and by 2020 that will be close to one in two (Laslett 1996), with life expectancy for women born in 1991 standing at an average of 82.8, and 78.8 for men. An effective doubling of life-expectancy since the trend began (ONS 2012).

This trend is not at its end in the UK and is being replicated worldwide, with some countries - like China - ageing very rapidly. In addition, due to falling birth rates, the world population is unlikely to rise exponentially,



as many environmentalists fear, but instead stabilise over the course of this century and decline after that. The long-term result is a radical and probably irreversible change in the shape of human populations. In the past, populations world-wide were predominantly young, but over the last 150 years the historical status quo has been reversed. In the UK, from 1900 to 2020, almost the entire growth of the population has been, and will continue to be in the 50-plus age group.

This dramatic restructuring of the age profile of our populations represents a major challenge, not just to the way we organise and plan our societies and economies, and to the goods and services we design and deliver, but to the way we think about and understand our new and greatly expanded life-courses. None of the old stereotypes are of any help to us in understanding these new realities.

Much of late 20th century consumer culture was built on the assumption that the youth market is the economic motor for the future. But the facts tell a different story. Over the past 100 years every additional consumer added to the UK marketplace has been an older person, not a young one. Add to this the growing demand for equal opportunities from the disabled community and it is very clear that there is a mismatch between business models and market reality. To rebalance this, mainstream consumer markets will have to concern themselves with the substantial number of people who are perhaps less than youthfully able-bodied yet wish to enjoy an active and independent lifestyle.

There is an interesting convergence here with environmental concerns. The damaging impact of human activity on our planet and its systems is increasingly



RACHEL'S KITCHEN AS IT WAS

recognised, and a stable or decreasing global population is as an essential part of a sustainable future. But such populations will be old, not young, and for them to thrive we need to focus on creating sustainable communities in which people of all ages and abilities can live independently and fulfil their personal aspirations. Communities in which older people are no longer condemned to become lonely dependents but can become active contributors and valuable members of society.

The more effectively this can be achieved, the less strain will be placed on social and welfare systems, and the more older people will be encouraged to spend the now considerable wealth they control on the goods and services that deliver independence and quality of life. The commercial challenge, therefore, is to develop a consumer offer that more closely

matches and includes the aspirations of older people.

A Transformative Moment

My interest in these issues snapped into focus in 1983 when a close friend developed multiple sclerosis in her early thirties. Rachel was a night bird, a jazz enthusiast with a love of life and music. She coped well at first with a minimum of help, but after a period of decline she began to find it difficult to care for herself, and a decision was made by social services that she should be placed in institutional care – standard practice 30 years ago.

Rachel's Kitchen As It Was

She lived in a Camden Council ground floor flat in north London, but the consensus from welfare and housing was that her kitchen



THE WHEELCHAIR-FRIENDLY REDESIGN: Aesthetics and function combined

was unsafe, and that she could not look after herself properly. This was before the advent of 'Care & Repair' and similar UK schemes for housing adaptation for people like Rachel, so the choice was stark. For someone who led a full social life institutionalisation amounted to a life sentence, and an end to her independence and outgoing lifestyle. To me this was a ridiculous idea, especially when it was clear that the design of her apartment was the source of the problem. So, with my then partner we challenged the local authority decision on the grounds that it was not Rachel's health condition but the design of her kitchen that should be addressed.

The argument was accepted, but without appropriate expertise or delivery mechanism,

the local authority could do nothing. To cut a long story short, having won the argument we redesigned the kitchen – not an easy task as the space was tiny – manufactured the appropriate elements, installed them and redecorated the room. The result of that, and other work on the flat, was that Rachel's independence was greatly extended.

The Wheelchair-Friendly Redesign

One evening, talking things through with Rachel – where should this go, how high should that be, all the practical ergonomics of a bespoke wheelchair kitchen – I asked her what was the single most important thing for her. What would make all the difference for her? An innocent question to which



WORKTOP WITH D-SHAPED ASH LIPPING RATHER THAN STIGMATISING GRAB RAIL.

I expected a practical answer about some physical aspect of the design. Instead, after thinking for a little while she said: “I want the neighbours to be jealous.” And at that moment I realised that she did not want a wheelchair kitchen, but a kitchen she could be proud of. Until then I had been focused on the wheelchair side and usability challenges, which were considerable, but for her solving those was necessary but incidental. For Rachel this was first and foremost a new kitchen and she wanted to be proud of it, show it off, not be typecasted by it. Like anyone else she wanted the neighbours to be jealous.

That was my light bulb moment. And from then on aesthetic issues – detailing,

materials, surfaces, finishes and so on – were just as important as practical issues such as making door panels and frames removable and replaceable when damaged by the wheelchair. It was not simply an issue of finding the right oven with shelves that were safe when fully extended, and easy to operate controls, it was also a question of what the oven looked like, how it was housed, and what that said about Rachel.

A good example – although unfortunately, it being 30 years ago, I have few photos – is the worktop lipping. Because of the tight space, the easiest way for Rachel to move around was to have a grip rail that she could pull herself about with, instead of constantly moving her hands from the worktop to the

wheels. But a rail would have said all the wrong things. Instead, I made a chunky 'D-shaped' ash edging, which extended down below the worktop with generous curves on the corners to create a continuous grip rail and feature detail. Stained yellow as part of the colour scheme, it was much admired. A further detail, also much admired, was the fitting of sections of the edging to pull out flaps hung on slides under the worktop. These provided additional resting places for dishes and convenient work areas that could pull out over her lap. Making these of solid wood added to the quality feel of the whole kitchen. In other words, pushing the envelope in terms of a users demands forces us to innovate in design terms. Rather than being a hindrance it can be an influence on new thinking and ideas.

London Innovation

In the early 1980s, Rachel's kitchen was mould-breaking and innovative and soon led to my being asked to take a lead in an ambitious initiative by the then very left-wing Greater London Council (GLC) led by Ken Livingstone, which was in sharp conflict with Margaret Thatcher. The aim was to establish a London-wide group of 'Technology Networks' - local walk-in centres combining workshops, design studios and office space - to act as catalysts for collaborations between designers, researchers, engineers, community-based organisations and skilled workers. The goal was to close the gap between producer and consumer by developing 'socially useful' products and services to meet the needs of local people and generate much-needed employment in London. The initiative was ambitious, utopian perhaps, and driven by political conviction rather than practical experience. What it urgently needed was

make it understandable and convincing.

As coordinator of one of these Technology Networks, 'London Innovation', my job was to create such examples. I set about doing this by scouring the London design school degree shows looking for interesting projects and talented young designers, and in parallel approached schools, hospitals, citizens groups and other local organisations to identify unmet needs within the community. To sift out the strongest ideas and projects we set up a design clinic / user forum, with expert members from business, design and entrepreneurial backgrounds, people with specialist knowledge relevant to individual proposals, and importantly people we called 'expert' users, who could articulate the lifestyle needs and aspirations of the people who might use the products and services we developed.

Exemplary Projects

By focusing resources on the most viable of those projects that met our practical, business and 'socially useful' criteria we quickly had a range of interesting concepts in development and well on the way to production. These included: The Cloudesley Chair, a component-based seating system for disabled children aged from 6 months to 16 years; a Mini-Gym, or exercise machine for people in wheelchairs; The Neater Eater, which allows people with intention tremor to feed themselves independently; Mobile, a household repair service for disabled and elderly tenants in two London boroughs; and The Lynch Motor, an innovative electric traction motor, ideal for environmentally-friendly electric vehicles, such as mopeds, city-cars, etc., and outboard and inboard marine drives.

The key factor linking all our projects was the

‘will the neighbours be jealous?’ test: the ‘wow!’ factor that can turn a functional concept into a game-changer. What Rachel wanted above all was not a ‘disabled’ kitchen but a stylish cooking space. Clothes, products and personal surroundings communicate strong messages about identity, social position and values, which makes meeting people’s aspirations as important as functionality and problem solving, if not more so. There were fundamental problems with concepts like design for disability, special needs design and design for the elderly, which were current at that time. Not only did they fail to address the aspirations and identity issues that were crucial to Rachel – the main emphasis being on basic functionality – but the users were seen as marginal and dependent groups rather than regular consumers and the dominant aesthetic was medical.

Making Design Inclusive

I became increasingly convinced that if things were to change, older and disabled people had to be served by the mainstream consumer market and not marginalised as groups with special needs. For that to happen, mainstream markets had to become more ‘inclusive’, and hard-headed business people had to see competitive advantage in adopting an inclusive, user-friendly business model. But making that happen – making mainstream design inclusive rather than exclusive – was not going to be easy.

We began that journey at London Innovation with research into telephone dialling problems commissioned by BT (then British Telecom). Our original brief was to uncover the dialling problems of people with disabilities and the goal was to enable BT to better design special needs phones through an understanding of the ergonomics of

DesignAge was from the beginning a practical form of participative inquiry.

dialling numbers. We set up a series of tests with a representative group of people with specific disabilities and age related multiple minor impairments. But, when we talked to our user group instead of just observing and measuring them, a very strong Rachel-like message came back: “Why a special phone for us? Why not a better phone for everyone?”

We were convinced, but how to convince the marketers and business decision-makers? To do this we set out to attach some hard numbers to the ergonomics – not an easy task prior to 1991, as until then the UK National Census did not record disability-related statistics, so there were no readily available numbers. However, a careful review of available data revealed the rapid growth in the number of older people in the UK, and with it the market opportunity to drive change in the UK and Europe, where the population-ageing trend was firmly established. Instead of simply listing the numbers of people with specific disabling conditions, we looked at how multiple minor disabilities impacted on the older population and aggregated the numbers to give a measure of the proportion of the population that is less than youthfully able-bodied. The result was a very large and growing number of people – the driver for inclusive design.

Unfortunately for us, Margaret Thatcher, who could not abide the existence of 'Red' Ken Livingstone and his left-wing dominated GLC based in its monumental County Hall headquarters directly across the river Thames from the Houses of Parliament, decided she would abolish it. The GLC was disbanded in 1986 and overnight the Future of London Innovation was under threat. We had no alternative but to greatly reduce the scale of our work and focus on the most viable of our products and services while undertaking research for companies like BT.

DesignAge

Luckily for me, designer Helen Hamlyn had very similar ideas about design and, with a substantial donation, encouraged the Royal College of Art (RCA), where she had studied, to set up the programme to 'explore the design implications of population ageing'. This was a perfect opportunity to continue my work on inclusive design and embed that thinking in a new generation of designers.

I had arrived at the RCA in June 1991, and DesignAge began in the summer of 1991 as an action-research programme aimed at inspiring young designers moving in to professional practice to build on the vision of the Helen's seminal 1986 New Design for Old exhibition at the new Design Museum in London. The emphasis was on action and the goal was to challenge preconceptions and change practice in business and design. This was achieved by encouraging very different communities to work together towards common understandings and so build and share new knowledge to drive and support change.

Unlike conventional academic research, where knowledge is created and handed down

The focus was on innovation through collaboration

by publication, DesignAge was from the beginning a practical form of participative inquiry. Very much a combination of theory and practice built around collaborations and partnerships – a dynamic that was to drive the initiative through 20 plus years of evolution and change.

Over the first six months contacts were made with the many individuals and communities we identified as potential collaborators. Among these was Peter Laslett, fellow of Trinity College Cambridge and co-founder of the Cambridge Group for the History of Population and Social Structure. Peter was the first person to fully understand the dynamics and social significance of population ageing, and, as a founding member of the University of the Third Age (U3A), an advocate for rethinking what it means to be an older person in the modern era. Through Peter, close links developed with U3A groups in London and Cambridge, giving DesignAge access to a large cohort of active older people and ready recruits to its user forums – a development of the design clinics of London Innovation days. Peter also introduced us to other social scientists and voluntary sector activists with a special interest in the subject.

Another important group of contacts was the original New Design for Old exhibition designers, like Kenneth Grange, Alan Tye and Sebastian Conran, and through them a wider circle of designers and ergonomists with an interest in older consumers. This

led to an enduring relationship with the UK Ergonomics Society, and designers with a shared interest in older users, like Patricia Moore, Maria Benktzon from Ergonomidesign in Sweden and Bill Moggeridge of IDEO. This rich network of contacts fed into a college-wide lecture series and student and professional design competitions, followed by a conference with the Ergonomics Society, a series of practical workshops on fashion, vehicle and furniture design, and a major project on supermarket design. All went under the banner of Designing for Our Future Selves – a slogan that Peter Laslett and I came up with to encapsulate the urgency of the project and make it personal for young designers – and all involved older people and young designers working together (Coleman 1993).

These activities generated a wealth of information, practical ideas, a collaborative methodology involving older users and exemplar designs from students and professionals, which in turn acted as a springboard for a major design initiative as part of the European Year for Older People (1993). When plans were first laid for that year the focus was on healthcare and pensions. Design was not on the agenda. However, with the strong support of Sally Greengross of Age Concern England and Eurolink Age, and funding from Apple Computers, a Designing for Our Future Selves conference was hosted at the RCA in November 1993. Over 300 delegates from 21 countries attended, a digest of the research findings of the first three years was published as a special edition book for the conference (Coleman 1993), and an exhibition and professional design competition were staged alongside it.

This was swiftly followed by a special edition of the journal *Applied Ergonomics*

(Coleman & Pullinger 1993), again under the title of Designing for Our Future Selves, and by the end of its initial three years ageing was very clearly on the design agenda and DesignAge on the design map of Europe. The collaboration with the Ergonomics Society was to continue throughout my time at the RCA, and in 1994 led to the first published rationale for inclusive design when I made 'The Case for Inclusive Design' at the 1994 Toronto congress of the International Ergonomics Association and the Human Factors Association of Canada (Coleman 1994-1).

Into the Mainstream

These early successes and the positive emphasis placed on ensuring the active participation of older people in society generated strong interest in design as a dynamic and enabling force. Requests for international lectures and conference keynotes followed. A small EU grant funded a meeting in Amsterdam to launch a 'European Design for Ageing Network' (DAN) bringing together universities from all EU members states. Led by DesignAge, the network rapidly attracted funding of over €1 million for a series of educational initiatives over the next three years, giving the DesignAge programme a strong international dimension and spreading its influence to design students across Europe.

Back in the UK the annual Designing for Our Future Selves competition at the RCA was well-established and supported by a growing collection of research material, while multiple publications and a strong presence in the design press secured the academic credibility of DesignAge (Coleman 1994-2). With a 1995 Queens Anniversary Prize for Higher and Further Education came full recognition of the achievements of the programme.

A major book in German published by DuMont as *Design für die Zukunft* (Design for the Future) (Coleman 1997) and an international travelling exhibition celebrated the achievements of the DAN, and kick-started a major EU-funded research project – PRESENCE: new technology for older people – with partners from the Netherlands, Italy, Norway and the UK (Hofmeester et al 1999). At the same time connections were made with Japan, where a network of major companies and municipal authorities was coming together around the challenge posed by Japan's rapidly ageing population, and with the USA, where the 1990 Americans with Disabilities Act had triggered a strong interest in population ageing. Contacts that were to prove very important for the next phase of the initiative.

Inclusive Design

The growing international profile of DesignAge convinced Helen Hamlyn of the potential for a long-term programme at the RCA. This was planned during 1998 and launched in early 1999 as the Helen Hamlyn Research Centre (HHRC). The focus was expanded from age to the broader perspective of inclusive design, and having achieved the initial goal of challenging prejudices and preconceptions about ageing, it was possible to apply a similar approach and methodology to other excluded social groups, including disabled people, widen the Centre's agenda to embrace age, work and ability as its core themes and establish it as the driving force behind inclusive design.

Two important appointments cemented this shift in focus – Jeremy Myerson joined as co-director alongside myself, and Julia Cassim as leader of a dynamic programme which she built around a co-design collaboration with the disabled community and the

Design Business Association (DBA). An early initiative was the Helen Hamlyn Research Associates Programme (HHRA), which teams new RCA graduates with industry and voluntary sector partners. The focus was on innovation through collaboration, offering research partners an opportunity to explore fresh ideas in tandem with the RCA studios. This work built on the rich knowledge-base built up since 1991 and delivered cutting-edge exemplars of inclusive design thinking and practice, while in parallel, the DBA Inclusive Design Challenge demonstrated that through co-design with disabled people leading UK design companies could shift perceptions of disabled people in modern society in a truly inclusive direction.

National and international recognition for the HHRC followed as a Ron Mace Universal Design Award in 2000, and a Sir Misha Black Award for Innovation in Design Education in 2001. But the results – exciting new mainstream products and services meeting the needs of groups previously ignored and overlooked – raised a very interesting question about what makes design inclusive or exclusive. On the face of it a simple question, but one that would unfold into an exciting and challenging research collaboration with the Engineering Design Centre at Cambridge University (EDC) by placing design, and hence products and services, on a trajectory from exclusion to inclusion reflecting their impact on peoples lives.

In other words it placed the consumer at the centre of a process of design improvement, a critical issue for both industry and the voluntary sector as it linked inclusive design directly with market forces and consumer pressure in a positive way to drive change and innovation. It also opened

up important questions for engineers and ergonomists about how we can measure and quantify the factors that underpin inclusion and exclusion by design.

Three substantial grants from the Engineering and Physical Sciences Research Council (EPSRC) underpinned 10 years of collaborative work that delivered a robust and influential body of knowledge and tools for inclusive design through the i-design research programme along with mechanisms for transferring that knowledge to industry and the design profession. The first four years were devoted to building the knowledge base with a focus on Design for the Whole Population and resulted in a Design Council policy paper and special sections for its website (Coleman 2002), a major text book (Clarkson et al 2003), a continuing series of bi-annual conferences at the RCA and Cambridge and exemplar case studies of design practice from the HHRA programme.

The next three years focused on understanding business needs and developing guidance and tools to enable the adoption of inclusive design. Much of this work was undertaken in partnership with BT, the DTL, leading Cambridge technology and product development company Sagentia, and the disability charity SCOPE. The result was a new British Standard BS700-6 on managing inclusive design (Coleman 2005), an Inclusive Design Toolkit as a book (Clarkson et al 2007-1) and website (Clarkson et al 2007-2), an industry training initiative and a further set of exemplar case studies from the HHRA programme.

The final three years of the programme were dedicated to enabling designers to work with users, by refining a set of tools and methods from design practice models developed at

How the effective use of design could help reduce medical accidents

the HHRC through its practical programmes. These explored ways to link the empathy of working directly with users to the hard data that gives design solutions the certainty and verifiability required by industry, and how to do that within the timeframe and budget constraints that industry and the design professions work to – specifically by seeking to understand how we can construct small groups of users to accurately reflect larger sectors of the population.

Design for Patient Safety

In 2003, the two strands of in-depth research and innovative practice came together in a powerful methodology for Evidence-Based Design, when the UK Department of Health (DoH) commissioned a study into ‘How the effective use of design could help reduce medical accidents.’ Along with leading healthcare ergonomist Peter Buckle of the University of Surrey, John Clarkson and I were awarded the research contract. The direct outcome in 2004 was two publications on ‘Design for Patient Safety’, one for dissemination across the NHS and the UK design community (Clarkson et al 2004-1) and a more formal document detailing the full research findings along with a comprehensive set of recommendations and early project proposals (Clarkson et al 2004-2).

The UK National Patient Safety Agency

(NPSA) and the UK Design Council responded with a series of initiatives on Design for Patient Safety, and much of the groundbreaking work that resulted was led by the HHRC through a newly established research group which I led and was to become the model for the present structure of the Centre around research labs for Age & Ability, Work & City and Health & Patient Safety, and work began in parallel on making medication safer, improving the quality of emergency care and redesigning the emergency ambulance.

At the same time, prompted by Lady Hamlyn's keen interest in improving healthcare, the HHRC and the Dept. of Surgical Oncology & Technology at Imperial College and St Mary's Hospital Paddington, under the direction of Prof. Ara Darzi, began discussions on how the three institutions might work more closely together. After exploratory work on surgical instruments this initiative was teamed up with the NPSA programme and resulted in a series of industry guidance publications on medication packaging and labelling and the design of infusion devices – all supported by exemplar designs based on the recommendations of the 'Design for Patient Safety' report – along with proposals for modernising the NHS ambulance fleet (Coleman et al 2007; Hignet et al 2007) and an innovative redesign of the ward resuscitation trolley.

Additional academic and industry partners and advisors were brought in for each programme and the methodology adopted was a combination of academic and user-based research. Because of the close involvement of NHS personnel from all levels, the guidance was extremely well received, as was the new resuscitation trolley design, leading to a sense of joint ownership

of viable solutions to real problems facing people working in healthcare.

Importantly, linking clinical research and user-centred design practice led to an evidence-based design methodology on a par with the evidence-based medicine that lies at the heart of modern healthcare (Coleman 2008). The next step was to consolidate and prove that methodology, which was made possible by a substantial award from the Wellcome Foundation for clinical trials of the resuscitation trolley at St Mary's Hospital and a £1.6million grant from the EPSRC for a major research programme by the HHRC, Imperial College and St Mary's Hospital on Designing Out Medical Error (DOME).

To date, apart from the industry guidance publications for the NPSA, the Design for Patient Safety initiative has delivered two new products – the resuscitation trolley, which is just completing trials, and a care station to co-ordinate routine nursing tasks around the patient, also on trial at St Mary's – an innovative redesign of the NHS emergency ambulance, and other exemplar healthcare designs. Perhaps most significant of all, it has validated and proved in practice a robust, evidence-based methodology that can and should be generalised to underpin better and safer design across healthcare.

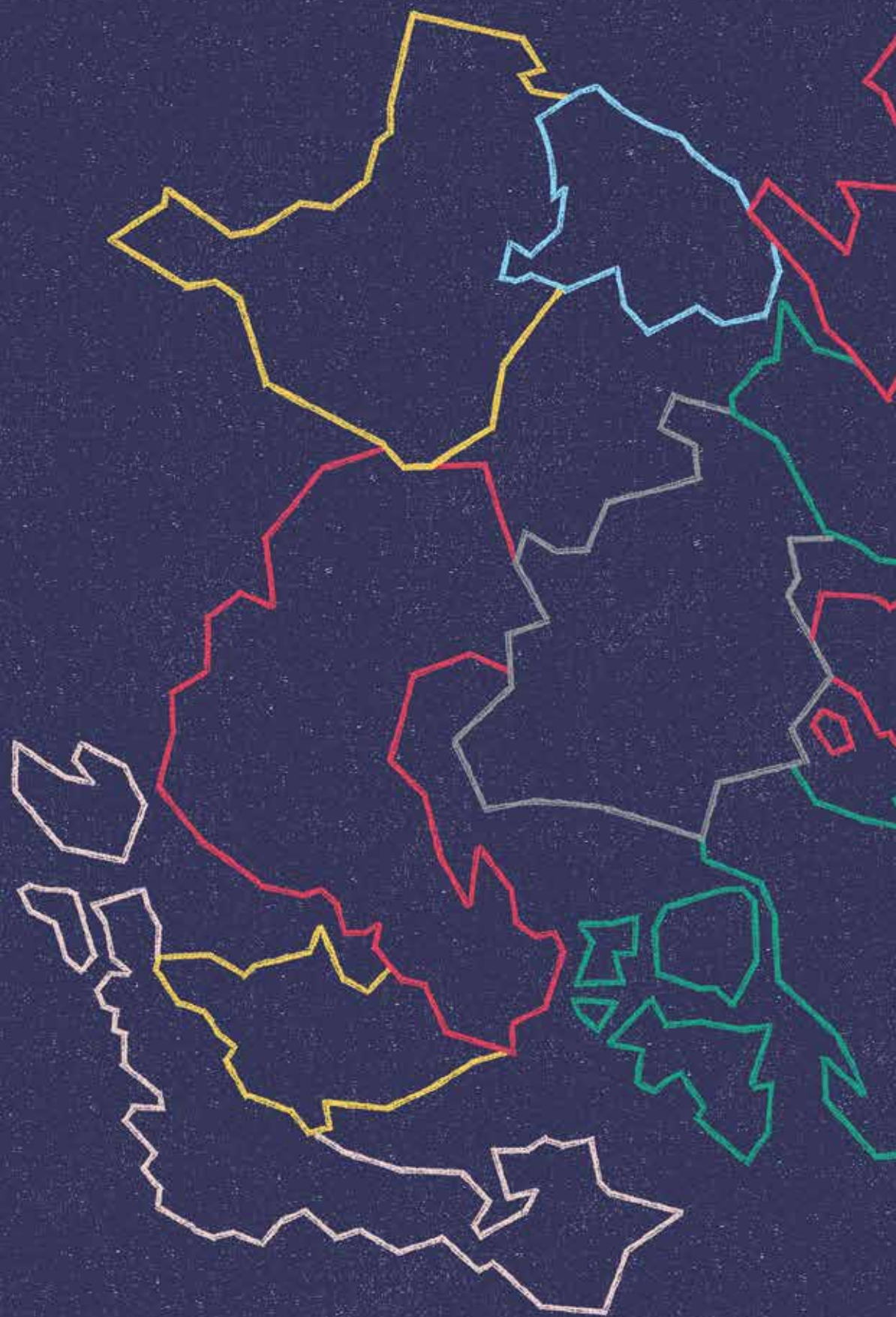
Recognition for this work came in the form of two "Medical Futures 2007" awards for the resuscitation trolley won, including overall winner in Anaesthesia and Critical Care; the NPSA won a Design Management Europe Award for the Design for Patient Safety series of publications; the ambulance redesign was named as a finalist in the first Victor Papanek memorial Design for the Real World Redux International Design

Competition 2011, and was outright winner of the Design Museum 2012 Design of the Year Award in the Transport category; and the DOME suite of new designs for the hospital ward were exhibited at the Royal College of Surgeons Hunterian Museum In London in January 2012.

Having established the research group and secured the funding I retired from the RCA in 2008, but continue my involvement as chair of the DOME advisory board and advisor to what is now the Helen Hamlyn Centre for Design. In 2010, Professor John Clarkson and I were awarded the Ergonomics Society William Floyd Medal and in 2012 we made Honorary Doctorates of the Catholic University of Leuven in recognition of our joint work on Inclusive Design and Patient Safety. ■

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PART II:

DESIGN FOR AGEING IN PLACE(S)



{STATS}

AGEING IN BELGIUM

- Western European country defined by its two main regions; Dutch-speaking Flanders in the north and the French-speaking southern region of Wallonia.
- Genk is a city and municipality located in the Belgian province of Limburg near Hasselt, north-east of the country. It is a former coal mining and car construction centre with a large number of immigrants.
- Retirement Protection in place.

Life Expectancy

(at birth as of 2014)

79.92 YEARS OLD

Median Age

43.1 YEARS OLD

Total Fertility Rates

1.65 BIRTHS PER WOMAN

Flag



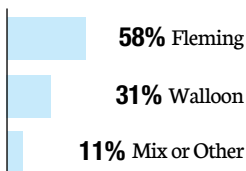
Size (sq.km)

108,560

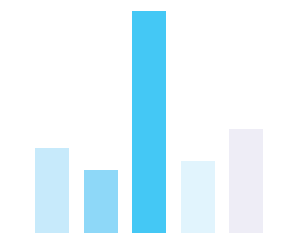
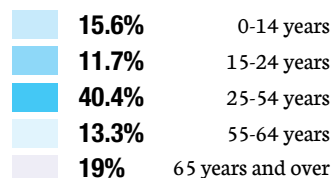
Population

10,348,276

Ethnicity



Age Structure



Retirement Age

65 YEARS OLD

RETIREMENT PROTECTION*

1st PILLAR

The State Pension

- Everyone has a right to a State pension but not everyone will receive the same amount.
- This is guaranteed by the Belgian government.
- Belgians have one of the lowest basic pensions in Europe. In 2005, the average pension in Belgium was EUR 12,000, compared with between EUR 14,000 to EUR 18,000 in comparable countries.

2nd PILLAR

Supplementary Occupational Pension

- The provisions for self-employed people and employees are different.
- For employees the supplementary or extra-legal pension is a benefit which the employer may grant, but employers are under no obligation to do so.
- Self-employed workers can save via a supplementary pension plan which attracts significant tax advantages.

3rd PILLAR

Personal Pension Savings

- The individual pension savings plan allows residents to top-up their future pension income of their own initiative, whilst benefiting from tax advantages in the current year.
- By making regular contributions to the plan, they build up a lump sum with interest, which they can then use when they retire.

4th PILLAR

Voluntary Personal Savings Without a Tax break

- Is for the self-employed.
- Pension savings and long-term savings can provide people with a sizeable capital sum over time, but the maximum deductible amounts are small.

* Sources: <https://www.ing.be/en/retail/Pages/pension-pillars.aspx> • <https://www.bnpparibasfortis.be/portal/start.asp>

Chapter 3

DEMENTIA LAB IN GENK, BELGIUM

by Niels Hendriks and Andrea Wilkinson

Introduction

The Dementia Lab is an ongoing project researching how to design and share low technology design solutions to make the life of individual persons with dementia, their caregivers, partners and family more pleasant. By low technology solutions we refer to artifacts that are acceptable with respect to daily use, costs (to create and maintain), aesthetics and integration in daily life. The lab uses participatory design techniques in the concept and prototyping phase and works in a one-on-one design set up together with individual people with dementia and their trusted caregiver or family member. The Dementia Lab teams up with several elderly care centres, Centres for Social Welfare ('OCMW') and persons with dementia and their environment of family, professional and lay caregivers in Belgium.

The aim of the Dementia Lab is threefold: besides creating low technology design solutions, we aim to share low technology solutions created by caregivers, family or persons with dementia. While spending

quite some time in the care and living environment of people with dementia, we noticed that people start creating their own (or appropriating existing) solutions to overcome the ailments of daily life. These solutions however stay in the privacy of one's own home or elderly care centre. To spread these through physical and digital channels might be beneficial to others.

The third goal of the Dementia Lab is to create an awareness of the participation of persons with dementia in the design process. Most research and design projects involve the person with dementia not as a partner (or co-designer), but as an object of study or informant in the design and research process (Span, Hettinga, Vernooij-Dassen, Eefsting, & Smits, 2013). Quite some projects use proxies like a partner, a son or daughter or a caregiver, translating the views, wants and needs of a person with dementia (Orpwood et al., 2004; Orpwood, Gibbs, Adlam, Faulkner, & Meegahawatte, 2005). To only rely on proxies or to see the person with dementia





as a mere object of study stems from the vision on the person with dementia as the so-called 'uncollected corpse' (Miller, 1990) or as someone who no longer possesses a sense of self (Cohen & Eisdorfer, 2001). Kitwood (1997), however, states that a person with dementia must be recognised as a person with thoughts, emotions, wishes and thus, a person who can and should actively be included in the research and design.

Who is the Team?

The team consists of a group of researchers and designers with a diverse background in jewellery design, graphic design and product design, linked to the Social Spaces research group (LUCA KULeuven, Genk, Belgium). Social Spaces is a cross-disciplinary research group operating within a context of art, design and reflection. Social Spaces' goal is to create social, participatory, but also imaginary

and functional designs for various (often neglected) groups within society. Next to the research and design team there is a close collaboration with caregivers such as ergo therapists, nurses and psychologists all being part of the multidisciplinary research and design group of the Dementia Lab as partners in a sounding board and partners on a day-to-day basis in the designing for and together with persons with dementia. Self-evidently the person with dementia together with their trusted family member or caregiver forms an essential partner of our participatory setup.

The daily working and methodological framework relies heavily on the work of Niels Hendriks and Andrea Wilkinson. Niels, a design researcher, is doing a PhD on participatory design together with people with dementia, while Andrea is focussing her research on one-on-one design for weak users.

The Dementia Lab project is financed by the Flemish Government - Department of Economics, Science & Innovation (Social Innovation call) from September 2013 to September 2014. One of the prototypes was commissioned by SOM+, a cluster of elderly care centres investigating the relation between residential care and family based care.

Who is the Community?

Though we focus on a large group of participants, the Dementia Lab also relates very strongly to its location, being the city of Genk (Flanders, Belgium). Our research group, Social Spaces has a tradition in working for and together with often forgotten groups in society, such as people with dementia. We see working in such an inclusive manner as a necessity to the context our academy exists within (set in the city of Genk, a former industrial city with a high immigrant population and high rates of unemployment), as an economic obligation and to broaden the work field for design.

Flanders, the region in Belgium where the Dementia Lab resides, has about 100,000 people with dementia and by 2020 this group will increase by 30%. Some 65% of the persons with dementia are cared for at home relying heavily on a network of professional and lay caregivers, their family or partner. This image fits within the principles of family based care model (Dawe, 2007), where care is not exclusively linked to professional caregivers of a care facility but the person with dementia is cared for in a shared care model. The family-based care model goes beyond organising care in a home environment and sees the home environment therefore as a way to participate in society.

The region in Belgium where the Dementia Lab resides, has about 100,000 persons with dementia, and by 2020 this group will increase by 30%.

The focus on other forms of care is also reflected in the Dementia Plan Flanders that was launched in 2011 by the Flemish Ministry for Welfare and Health (Vandeuren, 2010). This plan makes a sketch of dementia in Flanders and describes a number of recommendations that should lead to a dementia-friendly society. Central to this is the perception of dementia and the manner in which the care for people with dementia is done. In addition to the previously mentioned shift from residential care to care in a home context and in the immediate vicinity of the person with dementia (the Dementia Plan Flanders calls this the "Socialisation of care"), the plan also focuses on the feeling of self-worth of the person with dementia. Basic pillars herein are respect for and responding to the uniqueness of each individual with dementia; the respect for human dignity and integrity; and, openness and inclusion in social citizenship of which

the control of care (and everyday life) in the hands of the person with dementia should lie. The setup of the Dementia Lab, working through one-on-one design, in a participatory manner and in the care and living context of the person with dementia is based upon the principles of this Dementia Plan Flanders.

How Did It Start?

The Dementia Lab started with a large participatory project wherein internet-of-Things technology solutions were designed together with people with dementia in the ATOM project (Hendriks, Truyen, & Duval, 2013). We noticed that in this project it was very difficult to find a balance in the participatory relations between the people with dementia, the caregivers, the designers and the engineers. Also, the complexity of the project, making use of complex technologies, made it difficult to engage the people with dementia during the whole process.

City/Country & Timeline

Belgium, Region of Flanders, City of Genk
Start of Dementia Lab:

- **2011 – April 2013:** Working in various elderly care centres creating prototypes for individual residents within a research setup of searching for the possibility to integrate internet of things-solutions in an elderly care centre.
- **May 2013:** Submitting a proposal asking for funding for the Dementia Lab setup
- **September 2013:** Launch of www.dementielab.be / www.dementialab.com
- **October 2013:** First meeting with the sounding board
- **December 2013:** The first 'product', a Colouring Book for Persons with Dementia of the Dementia Lab is launched

Addressing Issue(s)

Dementia is merely an umbrella term used to describe a variety of psychiatric and cognitive symptoms and the way dementia affects daily life is different for each person. Personality changes, depression, hallucinations and delusions are the most known psychiatric symptoms. On a cognitive level people with dementia (from mild to moderate) almost always suffer from a deterioration of memory (such as amnesia), difficulties in language and communication (aphasia), the inability to perform purposeful movements (apraxia) or orientation in time and place (agnosia) (American Psychiatric Association, 2000). Additional behavioural and cognitive problems such as irritation or frustration, short attention span, restlessness, an inability to learn new routines or adapt to changing situations can occur. As a large group of the people with dementia belong to the group of older persons physical ailments like impaired eyesight, hearing or physical coordination are likely to appear (Harman, 1981; Lobo et al., 1999). There is no known cure for dementia ("WHO | Dementia," n.d.). One can only treat the behavioural and psychological symptoms and the accompanying physical illness. Aiding in optimizing physical health, cognition, activity and well-being of the person with dementia and provide support to caregivers will help the living and care situation of both the person with dementia and the professional and lay caregivers, family and friends. As mostly issues of well-being can be addressed in the support of people with dementia the Dementia Lab focuses on creating artefacts that can make the life of the person with dementia better, ameliorate their daily living.

Our vision in working with people with dementia is in contrast to the vision on the person with dementia as a non-human object,



a body without a spirit, going back to the original Latin translation of dementia, 'de' gone and 'mens' mind (without a mind). In his work *Folie et Déraison. Histoire de la Folie à l'âge Classique*, Foucault (1988) describes the way we deal with psychiatric illness and the 'demented'. Where in the 17th and 18th century the cognitively impaired were chained and locked, in the 19th century more subtle power mechanisms took place: the gaze of the caregiver, the painful confrontation with society, reason or labour. Similar to Foucault is the work of sociologist Goffman (1961) who puts forward the concept of "total institutes". Within total institutes, such as clinics, the military, psychiatric institutions or nursing homes, residents conduct their lives twenty-four hours within the walls of the institutes. Individual freedom is limited and eating, sleeping, leisure time, is determined by the institute (Goffman calls this mortification).

From a methodological point of view the Dementia Lab links to the social model of disability (Crow, 1996) that states that a person is only transformed into someone with a disability when society is not taking into account the wants and needs of the people

with impairments. Related to dementia, Lindsay (2012) states that "inappropriate design methodologies are a mechanism through which society disables people with impairments by ignoring them". Span (2013) also refers to Vernooij-Dassen (2005), and Werner and Heinik (2008), stating that "exclusion of people with dementia in research may strengthen the stigma attached to dementia".

A way to include someone in the design process can be done by using participatory design methods. Participatory design is always a challenging task for designers and stakeholders and therefore many participatory design methods have been developed to facilitate such a design process. The traditional participatory design methods, however, are not fully appropriate to incorporate persons with dementia (Lindsay et al., 2012; Muller, 2003). They create issues as they assume that the participants are cognitively able; can make use of visual and hands-on techniques; or require a high level of abstraction ability of the person with dementia. The Dementia Lab tries to share ways in which people with dementia (and their professional or



informal caregivers, family and friends) can be incorporated in the design process.

What Happened? Design Solutions

Four design trajectories have taken place in the Dementia Lab so far. Most of these trajectories are still in the prototyping phase. With the support of the Public Centre of Social Welfare of the city of Genk, four persons living with dementia were found. The persons with dementia were selected on the basis that they were willing to communicate about their illness and had a level of self-insight. All participants were formally diagnosed with dementia, but, legally, it was impossible to receive any information on the stage of dementia the participants were in. All participatory sessions took place in the participant's homes. The sessions started with a cake brought by the designer and the researcher and much time was spent on chitchat around personal life (children, work, stories of the neighbourhood) of the person with dementia and the other persons living there. In turn, the designer and researcher

shared both personal as well as work-related stories. As time is an essential factor in this gaining of empathy (Lindsay et al., 2012) two to four hours were spent with the family getting to know who they are, what problems occur due to dementia, what moments they enjoy together and so on.

As Luck (2003) indicates, a vast repertoire of methods and their use for participatory practice has been developed and reported. We decided to choose from this repertoire, critically reflect on it in relation to the design process we wanted to set up with a specific person with dementia and adapt it towards the specific context we were working for: who besides the person with dementia is present? How will the use of the method fit inside the daily routine of the participants? How does it relate to an activity or routine of this person with dementia? The inspiration for this adaptation came from the encounters with the person with dementia and their family in the previous session. This method of working is not only adapted towards the



person with dementia, but also towards the interests, experience and background of the designer. The method is also discussed in multidisciplinary team meetings (with a psychologist, ergo therapists, the design researchers). In this way, the designer and researcher become an essential part of a multidisciplinary team and integrate in meetings on the person they are designing for (and together with). This helps to gain understanding of the implications of the use of a method in a certain context, with a certain person, in a certain stage of her or his life.

Four prototypes came out of these sessions. I will elaborate on two of them. The first, a colouring book for persons with dementia, uses the same processes as a childrens colouring book (large line drawings) but works with colouring pictures that refer to an important time in the person's with dementia past: a Volkswagen beetle from the 50s, a bottle of lemonade from that era; views of how their hometown looked like.

Our vision in working with people with dementia is in contrast to the vision of the person with dementia as a non-human object: a body without a spirit.

The colouring book combines the ease of use of a children's colouring book without being childish.

A second project is a project mockingly called 'First Aid Kit for Living with Dementia'. It tries to lower the threshold on discussing (the ailments of) dementia when an official diagnosis has been made. Besides this, it stimulates thinking about creating your own low-tech design solutions to overcome the ailments of daily life. The box holds a small book answering questions such as "what is dementia?" and "how will it affect my daily life?" in a clear and direct way. Inside the box a number of tools can be found (from coloured



key chains to icon stickers). These tools do not serve as an all purpose solution for every person with dementia, but aim to trigger the person with dementia in their environment to create their own low-tech solutions. ■

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www.ilseraps.be

Chapter 4:

WELCOME TO SAINT-GILLES, BELGIUM

By Virginia Tassinari

Introduction

'Welcome to Saint-Gilles' is an ongoing project where students of the MAD Faculty (Belgium), together with students coming from three other schools of the Meuse-Rhine Euregion (a territory spanning Belgium, the Netherlands and Germany), i.e. Hogeschool Zuyd (Maastricht, NL), Saint Luc (Liège, B) and La Cambre Brussels (B). The project started in 2011, when the schools started to work together in order to enhance social cohesion within the neighbourhood of Saint-Gilles in the city of Liège (Belgium). Field research carried out uncovered several challenges: a lack of communication and social cohesion among inhabitants and other local actors, a sense of fatalism and nostalgia, the absence of local associations,

of an overall community and area identity, the widespread presence of vacant shops and squatted houses as well as a general feeling of a lack of initiatives or positive perspectives regarding the future. Yet what probably characterises Saint-Gilles the most is the unusually large amount of students (the majority) compared to the local inhabitants living in the neighbourhood. The cause of this is to be retraced to the remarkably large amount of schools in the city of Liège, which all moved into the area almost at the same time (in the 50's) for economic and social reasons. Since then students are often seen by the neighbourhood as a nuisance or a threat even, as their presence had a monoculture of local entrepreneurship and

services as a consequence. Local shops - grocery shops, artisans, small-scale activities - slowly disappeared. Just a small amount of them were replaced, and often by very similar kind of activities, such as cafés, take-away and shops focussed on students as a presumed homogenous target group. Main street devolved into a half desert, and the neighbourhood started to become perceived as unsafe and became more or less left to its own destiny. Nevertheless, field research also pointed out that there were many resources in the neighbourhood from which to start to sow seeds of positive change. There were stories, skills, time, energy and a will to change, and most importantly, many enthusiastic, warm, curious and generous people.

This research project has been strongly supported since the beginning by the local Triennial of design, entitled Reciprocity (designliege.be), and Wallonie Design, a non-profit organisation promoting design in the region of Wallonia (walloniedesign.be). For one year, students from the design schools involved co-designed and co-produced solutions for the neighbourhood in order to strengthen social cohesion and empower inhabitants to work in a proactive way in order to improve their neighbourhood, instead of waiting for the local authorities to solve all possible kinds of problems. Over 80 micro-solutions resulted from this process (8 schools participated in the first round of projects) inspiring and engaging citizens. The first results have been showcased in 2012 within Reciprocity, in the exhibition 'Welcome to Saint-Gilles', curated by the Belgian designer Thomas Lommée who had also been part of the process with his students from the Design Academy in Eindhoven. In the exhibition, hosted within the neighbourhood of Saint-Gilles, the co-designed micro-solutions were presented printed as postcards for

Over 80 micro-solutions resulted from this process

inhabitants to take home, develop them further and create new synergies inspired by them. This is what happened: the exhibition stimulated conversations amongst inhabitants, who started to speak about possible ways to implement the projects. Together with a partner of the project, ID-Campus, they formed a first association of the neighbourhood. The street committee, formed by a core group of 30 people, started to co-produce some of the solutions co-designed with the students, and also came up with new solutions for the neighbourhood. They also created their own blog and magazine with their own activities, and started to revitalise the neighbourhood with projects such as urban knitting, the introduction of a street festival with music, the use of empty shops for showcasing possibilities and scenarios for the neighbourhood, and so on. In two years time, the neighbourhood developed a stronger sense of belonging, saw the start of a number of activities initiated and carried out by the inhabitants in order to improve the quality of life of their neighbourhood, a new positive image for the street, and most of all they started again to talk together and to acknowledge the fact that together things can be changed. Some empty buildings have been in the meanwhile reconverted by young creatives into new businesses, cafés, shops. The main street is more lively and slowly also perceived as safer than it used to be.

A neighbourhood transformation takes quite some time however and a lot can still be improved. In the second round of the project,

with the students of the MAD Faculty we directed our focus to specific aspects of the urban transformation process and which could be empowered by the collaboration with design students. We identified some areas that could be considered as valuable entry points for the creation of a more resilient and healthier neighbourhood. For one thing, we noticed that the distance between elderly living in the neighbourhood and the students was still difficult to bridge. We decided to work specifically on this issue and to ask our students to find ways to stimulate and support this interaction. Among the members of the street committee - and many of the other stakeholders with whom the students engaged as well - we counted many retired and elderly people, all very motivated to improve their neighbourhood. Simultaneously, almost no students were involved in the street committee. No initiatives of the street committee directly involved students, even though they are the bigger part of the population of Saint-Gilles. Students proved to be a difficult target group to reach by means of the activities of the street committee. They appeared generally not interested to improve their neighbourhood, as they considered Saint-Gilles to be a mere temporary location. As such, they did not find it particularly fruitful to invest time and energy to improve the local quality of life even if it included them. They also perceived our project as a “task”, something to do on the top of their already busy schedule, instead of to see it as a possible solution to some of their own, daily life issues. In a way, what were considered as prejudices regarding the students of them being but passive “consumers” of the neighbourhood instead of active participants, were hence confirmed. How could this issue be tackled?

Yet not only students were a difficult target group for the street committee. It proved

equally difficult for them to attract fellow local inhabitants - elderly or not - beyond their fellow community members already involved in the street committee. Many of the elderly for example were either very enthusiastic, or very passive regarding the proposed initiatives. Since the introduction of the schools in the 50's the sense of community slowly disappeared, and with it also many social contacts. Those who were young in the 50's grew up with little contact to their neighbourhood. As result of this, many elderly in Saint-Gilles live isolated from the rest of their community. Could students help socially excluded elderly people to improve their quality of life along with the quality of life within their neighbourhood? Could the elderly be seen as a resource in order to further engage students in promoting social innovation in their neighbourhood?

Who is the Team?

Four schools are currently working on Welcome to Saint-Gilles II with their teachers and students: MAD Faculty (Product Design and C-MD departments), Hogeschool Zuyd Maastricht, Saint-Luc Liège and La Cambre Brussels. A core group of three experts are putting their know-how and expertise at the disposal of the projects: Francois Jegou, Nik Baerten and Virginia Tassinari. Virginia Tassinari has been working with her 2nd year Product Design students to specifically tackle the issue of elderly as asset of social change in Saint-Gilles. Wallonie Design, Reciprocity, the street committee and local partners and stakeholders all provided support in organising the co-design sessions with our students.

Who is the Community?

Saint-Gilles is a neighbourhood of the city of Liège, Belgium. Besides its local

inhabitants, it is mostly populated by students - coming from other neighbourhoods of Liège or from other cities and studying in one of the schools situated in the neighbourhood. As far as the local population is concerned, they are mostly families and elderly. Among those, some are involved in activities of the recently established local street committee, and actively willing to improve their neighbourhood. Yet, the majority of them are less involved and appear less interested in the street committee and its initiatives or an active role in improving their local surroundings.

How Did it Start?

The project started in 2011, thanks to Reciprocity and Wallonie Design. These two organisations invited the Euregional schools to work on co-design and co-produced innovative sustainable solutions for the neighbourhood of Saint-Gilles. The aim of the project was to help the neighbourhood to identify its most relevant social challenges and to try and tackle them in a proactive and collaborative, co-creative way.

City/Country & Timeline

Liège, Belgium

- **2011** preliminary field study (in the Sustainable Summer School - Recentre)
- **2011-2012** first round of projects
- **2012 October** presentation of the first outcomes - exhibition Welcome to Saint-Gilles (Reciprocity)
- **2012-2015** second round of projects

- **2015 October** presentation of the projects' outcomes – exhibition and Public Innovation Place 'Welcome to Saint-Gilles'

Addressing Issue(s)

How can we (re)consider the elderly to be assets of positive change within society? In Welcome to Saint-Gilles we looked at ways in which to consider the elderly – especially those currently less well-connected – as an asset for initiatives that can attract the students living in Saint-Gilles to be part of neighbourhood life in a more (pro)active way, participating together in initiatives aimed at reinvigorating Saint-Gilles. The ultimate aim of the project is to improve the quality of life for both elderly and students, as well as that of the neighbourhood in general.

This represented a major challenge to students, as it required them to develop different strategies to engage two target groups, i.e. the elderly feeling disconnected and the students not really considering the neighbourhood their home. Can elderly be a resource to attract students in the process of innovating the neighbourhood they both share? How can we empower elderly, with all their knowledge and wisdom, to attract young people, offering them something of which they are not even aware that they are looking for it? And, the other way around, can students be considered a means to reconnect disconnected elderly with the community? Generally speaking: How can we as designers stimulate the creation of a positive loop between elderly and students?

Project Organisation

Virginia Tassinari has been working in the neighbourhood with her Product Design

Could the elderly be seen as a resource to engage students in promoting social innovation in their neighbourhood?

students from MAD faculty within a small course module of 24 hours. After having conducted some basic research about the neighbourhood on their own, the students went a first time to Liège to carry out basic field research. They developed and deployed different kinds of urban probes, in order to engage all different parties in conversations about their neighbourhood on the street, and to make sure both elderly and students were part of the conversation. For instance, they created a temporary soup bar making use of an old local recipe. Soup is something that elderly eat very often, because it is something traditionally belonging to their reality. Students also eat soup, because it is easy and quick (and increasingly fashionable). They were asked to reflect upon their ideas about the neighbourhood writing them directly on the soup paper cups. Another group of students held a temporary café on the street, distributing coffee, tea, cookies and a simple card-game, where both elderly and students could directly answer specific questions regarding

their neighbourhood. After this first round of research, students came with specific questions for local stakeholders they met during the field research, and initiated a co-design process with them. Afterwards, they also created temporary happenings in order to attract people to give their feedback to their first design propositions. After many sessions of fine-tuning, the projects were ready to be presented to Wallonie Design, Reciprocity and the street committee. Now we are in the phase in which some of these projects are about to be finetuned and co-produced with the local community during the next academic year.

What Happened? Design Solutions

The students, in their co-design sessions with the inhabitants and the local stakeholders, came up with ideas in which the know-how of elderly concerning traditional cooking techniques and ingredients could become a way to connect elderly with students. Various services and solutions connecting elderly and students were envisioned; for instance, a living room restaurant service which can provide a win-win situation for both elderly and students. The main concept is that elderly can use their home in order to offer healthy, traditionally home-cooked and local meals to students. Students, on their behalf, can register with the living room restaurant system, which guarantees them quality food and a home-like feeling for a reasonable price. This would guarantee the social contact between these two groups and with the street committee, as a partner in the project. This dialogue could further spur their engagement in the activities of the neighbourhood and enhance the feeling of belonging and 'community'. The limit of this project however is that it is not directly aimed at new actions to be undertaken in the neighbourhood,

but rather focusses on establishment and grounding of a first contact.

A second group of students thought about this issue and worked on a more radical solution. Why not “use” this fresh new connection between elderly and students granted by the living room restaurant services in order to engage both of them directly in social innovation-oriented projects? Hence they introduced an alternative currency in order to “pay” for the living room restaurant. This currency could be “earnt” by engaging in actions in the neighbourhood, for instance through taking care of the cleaning up of the street in a collaborative way. This idea was very much welcomed by the local partners already working on the introduction of a local currency in Liège. Now the idea will be prototyped and tested with a larger group of inhabitants and stakeholders in the neighbourhood, to see how to further tune and improve it, matching it also with other ideas coming from the projects of students from other schools involved. As a matter of fact, other groups of students from the partnering schools, which were not directly asked to address this issue explicitly but were instructed rather to work on creating collaborative services, came up with similar solutions. This shows the receptiveness of the generation for the issue as well as the type of solution, and acknowledges the value of elderly by the design students as active partners in establishing radical change in the neighbourhood.

In October 2015 we will set up a temporary Public Innovation Place in Saint-Gilles during the Design Triennial Reciprocity, which will represent a dedicated place and especially a dedicated moment of collaborative co-production of the concepts co-designed by the students with the inhabitants. During this year further experimentations will take

place with the street committee, testing out the various concepts generated by the schools and involving both elderly and students in the process. The Biennale will be a moment in which we will be able to make a first evaluation on how elderly and students have been involved in this process, how the co-design was a moment of truly fruitful encounter, and to evaluate the results of the first experimentations in order to move to implement a selection of the concepts. This will help us to evaluate if the students succeeded in seeing the elderly as asset of social change, and understand better the degree to which they became a point of strength in the difficult and long process of stimulating inhabitants to improve the quality of life of their neighbourhood starting from their own resources. ■

AGEING IN BRAZIL

- Brazil, officially the Federal Republic of Brazil, is the largest country of both South America and the Latin American region. It is the world's fifth largest country, both by geographical area and by population.
- Rio de Janeiro is the second largest city in Brazil, the sixth largest city in the Americas and the world's thirty-fifth largest city by population.
- Retirement protection development in place.

Life Expectancy

(at birth as of 2014)

73.28 YEARS OLD

Median Age

44.5 YEARS OLD

Total Fertility Rates

1.55 BIRTHS PER WOMAN

Flag



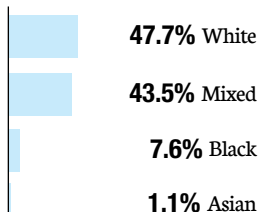
Size (sq.km)

8,358,140

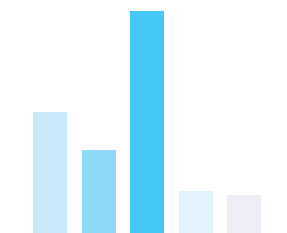
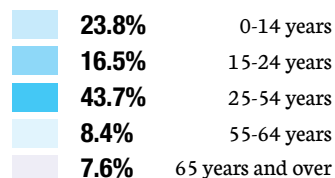
Population

202,656,788

Ethnicity



Age Structure



Retirement Age

65/60 YEARS OLD

RETIREMENT PROTECTION*

1920

- The first proposals for a pension system in Brazil were initiated to provide income insurance for special groups: military and civil public servants.

1923

- Another decree determined the creation of a Cash Retirement and Pensions for all railroad workers and stevedores.

1933

- The first Brazilian institution of social security nationwide was created which was based on the generic activity of the company.

1945

- The Office of Social Services was created.

1964

- The social insurance funds were consolidated into a nationwide public social insurance system. Elderly above 70 years who did not have any kind of income are covered by the social insurance system.

1988

- A new 'social contract' is encouraged which crystallised in the 1988 Constitution.

2003

- The main points of the Brazilian Social Welfare's reformat the following: $\frac{3}{4}$ reference age for current workers goes up from 53/48 (M/F) to 60/55 (M/F), including rules that discourage early retirement.

2006

- Social Service presents an expressive increasing in the number of contributors from 2004 to 2006. The number increased 8,9%, changing from 30,6 million to 33,3 million supported by the system.

* Sources: thesis.eur.nl/pub/5711/Tol,%20J.%20van%20%20302692.docx • <http://thebrazilbusiness.com/article/brazilian-pension-system>
http://www.previdenciasocial.gov.br/arquivos/office/3_091113-150152-707.pdf

Chapter 5

THE ARTIFICERS GROUP IN MESQUITA

By Carla Cipolla and Márcia Tavares

How Did It Start?

From the 20th century to the present day, almost all the stories people have heard about Mesquita City - where the artificers live - say that it's a very poor and violent place. And it is not a lie, but just the dramatic result of government default. Mesquita is not recognised as a "favela", but except for some particularities that differ from one to the next, common characteristics such as poverty, drug traffic, violence and government neglect make it fairly similar to one. We can easily see social problems and there are few opportunities for ageing well, if we consider the four pillars defined by World Health Organization and Alexandre Kalache for an active ageing: health, security, participation and lifelong education.

As older women's social benefits are not enough to support themselves, the 'Artificers Group' was created to face the need of generating extra income. It would furthermore better occupy their free time and their minds, since their children or husbands had either left home or died. It is a way to combine their previous abilities, acquire and share knowledge and optimize resources in order to face the challenge of ageing in place and living a better life in old age.

The group is possible because of the existence of some typical characteristics of people who live in poor regions in Brazil: solidarity, creativity, willingness to work and entrepreneurship derived from their needs.



Adélia and Eduarda, two friends and members of the artificers group.



Two of the group members talking about patchwork application.

Current Situation

The Artificers Group, as the name suggests itself, is a group created by older women who have the ability to do manual labour, despite their advanced age.

Their resources are scarce, and they do not have a workshop yet, so they work in their own homes individually, and sometimes they meet in two or three members and work together, as an improvised way of making the group a reality. They work every day although they do not have pre-established hours for doing so. They sell their crafts thanks to word-of-mouth, but they are preparing themselves to find new markets, to increase production and to create new channels for the sales.

The Artificers Group is a small network of older women who have been living close to each other for several decades. They are friends. Up until now, they number eight women. Almost all of them are retired workers or pensionable but all of them need to work for an extra income. They organise frequent non-formal meetings, depending on availability and needs of the members. They also interact via social media.

researcher that connects to the researcher's studies about the ageing workforce in Brazil. It has been an inspiration for the researcher's studies at the Production Engineering Program at COPPE, Federal University of Rio de Janeiro (UFRJ), as a Master of Science* student. And further, the researcher has lived near the older women between 1978 and 2011, and can still observe their ageing and creative processes.

*M.Sc. student: Márcia Tavares; advisors: Fabio Zamberlan and Carla Cipolla.



Artificers working together to test and create new decorative glasses

Engagement with Researchers

This group of older artificers is part of a personal project coordinated by the



Who Are The People?

As previously mentioned, the group consists of eight friends; retired women living in Mesquita City, state of Rio de Janeiro. Their ages range between 63 and 74 years and they have lived in Mesquita for between 30 and 70 years of their lives. They don't intend to age in any other place than there; their friends, memories and stories are almost all connected to their homes in Mesquita.

Each person reaches old age in a different way, depending on their experiences and course of life. The women of Mesquita have many things in common due to their shared pasts. They have had similar experiences; similar stories of childhood abandonment, their fight against poverty, and the loss of loved ones such as children, parents, brothers and husbands.

This is a story about them, but not the only story about them. With a proactive attitude,

they decided to change their lives and the lives of other women with simple resources: their knowledge, their empathy and their stories about how to overcome some of the ailments of old age, as well as how to make an extra income for living more comfortably in this part of life.

For them, ageing can be a fulfilling and active experience. The colour of their art is a way to express a common vision about a new way of ageing. There are some important things we must know about these women: none of them had great opportunities to access formal education because they had to work from the age of eight. However all of them decided to come back to regular classrooms during their sixties. Some of them went back to school, but fearing the dangers of drug trafficking there, gave up studying for a while. They continue to study free courses, especially video-classes on the internet.

The older women use computers (desktops, notebooks or tablets), and they love computer games and become very angry when any technical failure prevents them to access the internet, or from doing their daily research on their preferred handicraft websites or Facebook fanpages.

Although they are older women, they hardly ever talk about illness because in their minds there are many other subjects to talk about.

The use of technologies contributes to keeping their cognitive capacities occupied and constantly learning. The benefits can be seen by the way they organise their thoughts, write and talk nowadays. Their memory is better too. Intergenerational relations are welcomed in their group, and working together motivates them to learn something everyday.

Perhaps the most important thing these women have taught us - beyond their natural ability to undertake in handicraft services as artisans - was resilience. Although they haven't much financial capital or degrees in entrepreneurship, they are slowly building and managing their own business together.

They have understood the vision that by joining each other, working with people from different generations and adopting new technology, they could optimize their resources and increase their knowledge about handicraft production and strategies for selling them. They also can help other poor women by teaching them the way they are doing it. And despite the intrinsic social problems involved, they are finding their own way out of poverty, social isolation and other old age ills. They are always anxious for the next step. And that is the way they choose to tell their stories.

What Are They Doing?

Let's have a look at the Artificers Group as a project. They have completed an assessment phase in which they have investigated and learned about themselves and preferences, what kind of products and how to improve the business. Now they are preparing to announce and sell the first crafts they have produced on the internet.

In practice, for now, they do things on demand. With the researcher's support, the group of older women are learning about design, e-commerce, photography and sales. They are learning how to use technology and how to develop a niche market for their crafts too.

They use the tacit knowledge shared by mothers, aunts or grandmothers to create decorative items for the home, making them what we call artisans. They work with several materials such as glass, wood, thread, wool and they use different techniques to produce the crafts, such as patchwork, crochet and tricot, painting (wall, fiber, wood etc), needlework, woodwork educational fabric dolls representative of older people. The final result is a variety of decorative items for the home and educational toys for children. The members of the group meet frequently to share knowledge, to work and to evaluate the crafts created by one another.

They are adopting technology and dedicating themselves to plan and organise the group's activities. Their plans are: start selling the artisan handicraft on the web, through e-commerce platforms. Facebook is another platform they intend to use, creating a fanpage in which they can post about their products and their group. Lifelong learning helps them not only in financial security, but means that they can age in the place that they have lived, for some of the group, 70 years of their lives.



Some of them give classes to low-income women in the city municipality or at home. And they are discussing about how to continue to engage and support the group.

Individual Ageing Stories

Let us read about the stories of four women that are member of Artificers Group:

Adélia, 63

She is a widowed woman who experienced the death of many of her loved ones, such as her mother, two brothers, a nephew, some friends and her husband who died of a pancreas cancer almost 7 years ago. She started working at the age of 8 because her father had abandoned her mother with their five children. As her mother had no financial conditions to support her family alone where they lived, she decided to move with all the five children to a “favela” in Rio de Janeiro, where they have lived in precarious conditions for almost 20 years of their life course. Since then, she has begun her journey in handicraft.

When she got married, she moved with her husband to Mesquita city, 36 years ago and hasn't left. She is the leader of the artificers

group and a very popular person in the neighbourhood where she has lived and educated more than 100 people - children and adults - in her own home, in the past. It has been a way to support her family, complementing her husband's income. She is still known for being an example of an entrepreneur women and people uses to ask her for advices about their lives. A few years ago, she went back to school, a public school in the city but she was not successful, since she felt vulnerable because of drug trafficking in the school. But she still dreams about studying again.

Since she has learnt to use the notebook, tablet and internet, she has understood that technology could help her, and sometime later, the group. So she was responsible to



motivate other women to learn it too, and they have gotten it. She is a user of Facebook and Google tools, and she is responsible for daily benchmarking of craft items at Facebook and other websites.

She manages her own house where she lives with her daughter's dog, she does physical exercises four times a week, works on craft production daily, in addition to other paid-for service activities. She has been working for 55 years of her life, but contrary to what one might imagine, she hates the idea of stopping work, and intends to work until the last day she is able to. She often says that she doesn't feel the weight of ageing, because she really feels "as if she weren't 30 yet".

Vilma, 74

She was born in 1940 and has lived in Mesquita city since then. She is the oldest woman of the group and had a terrible loss few years ago, with her youngest daughter dying in her 30s. Vilma has worked since she was 12, when she has begun to learn about handicraft with her aunt.

She often says that she doesn't feel the weight of ageing, because she really feels "as if she weren't 30 yet"



She says that she hates to feel like a prisoner. That's why she doesn't like when her family tries to change her daily agenda on their own, and she usually goes out from home to her gym session twice a week and to a market where she buys raw materials.

She has worked as a babysitter for decades, but nowadays, she is retired and has no paid activity unless the handicraft. But she says that the main motivation for working with crafts is to have something to do during her days. She wanted to make some money too, of course, but she had no sale channel for it and the most important for her was the social participation and the state of being occupied with some labor.

She has learned to use computer recently, motivated by Adélia, the leader of the group and now she is learning about Facebook. Her dream is to graduate in Psychology studies.

Marília, 67

She married when she was 16 years old and from the marriage, 5 children were born. Her family was poor and raising the five was

a great challenge. She was the first woman of the group to use a computer and to access the internet. As the income of her husband's work was not enough - and isn't yet - she decided to learn how to make crafts with her mother and grandmothers. Since then she hasn't stopped. Her work as an artisan has helped her in the task of supporting her family, and at present, despite her children already leaving home, she helps them with a financial contribution to her grandchildren's needs. A few years ago, she went back to school, a public school in the city, however she felt vulnerable because of drug trafficking in the school. This is when she and Adélia met as classmates.

Marília is a member of the group of artificers and still give free handicraft classes to low-income women in a public institution of Mesquita municipality. Besides that, she does daily physical exercises, works in her crafts and helps her husband in his small business.

Nowadays, she uses Facebook and Orkut to post about their crafts. And she loves playing in the computer too. She also uses computer technology to search for handicraft references, techniques; videos and to buy raw materials.

She says that she hates to feel like a prisoner.

Eduarda, 70

She is the only woman of the artificers group whose work is not the handicraft itself. She does not use a computer or the internet yet, but she knows how to use a calculator very well. So she is responsible for other activities, such as the packages, the calculation etc. She is very competent in sales and her role in the group will be explored more in the future, when they increase sales.

Remarks: Aged Culture To Inspire Social Innovation

As a group of older women, they are applying their tacit knowledge - which has been transmitted from other generations of women - their natural talent for undertaking services and products such as handicraft,



their resources and technology to increase their financial security, to maintain their participation in life decisions, to expand knowledge and to avoid social isolation for them and other women too. These attitudes can improve social innovation and allow an active ageing in place for them. ■



Old table and chairs refurbished by the group



Chapter 6

ACTIVE AGEING AND BIG EVENTS: INCREASING HOSTING SPACES IN RIO DE JANEIRO WITH THE ELDERLY

By Carla Cipolla, Márcia Tavares and Fernanda Zanela

Introduction of Research Team

DESIS Group (Design for Social Innovation and Sustainability) is a research group created in 2008, based at Federal University of Rio de Janeiro, COPPE - Production Engineering Program. It advances the practice and studies of design-enabled social innovation towards sustainability in Brazil. Particular focus is given to service design.

The society is considered as a “laboratory” of new ways of living in the view of sustainability and DESIS Group is targeted to improve and diffuse - through design activities - these promising solutions. When promising cases of social innovation are recognised in their peculiarities and the demand they potentially express is understood, they may become a test site for the development of a new generation of services. If interpreted correctly, these cases also voice a deeper demand: to promote lines of research that aim to generate technological and organizational platforms able to encourage similar life models.

DESIS Group is the coordinator of DESIS Brazil Network, which gather researchers that share similar views and are willing to co-develop projects on topics of common interest in Brazil.

How Did It Start?

This study aimed to examine how to promote domestic hospitality in elderly's homes in Rio de Janeiro. This proposal also responds to the increasing demand for an alternative accommodation in the city, particularly induced by big events as World Cup and Olympics.

The research involves a) elderly residents in the city (with rooms available at home),

How to promote domestic hospitality in Rio de Janeiro

and b) tourists. The project involves elderly people who have skills; interesting life stories or good experiences linked the city, as part of the "cultural heritage" in Rio. These elders will allow tourists an experience in Rio de Janeiro from the point of view of an older person who lives in the city.

Our goal is focused on the unexplored potential of collaborative services of the elderly living in the city of Rio de Janeiro to the tourism sector, focusing in the domestic hospitality. The benefits of this service are: a) from the perspective of the elderly, reduction of social isolation and risk of loneliness; new skills development (particularly in technology); practice of cognitive activities; development of trust and solidarity between generations; income generation; and engagement in an important moment for Rio de Janeiro; from the perspective of the tourists, promotion of a responsible tourism through the interaction with the local community; and privileged access to cultural heritage in Rio through contact with the elderly people in their homes.

The contribution of the research is to promote active ageing, including the elderly in their context (city of Rio de Janeiro).

Timeline

- **July 2013 — January 2014** Research (literature review and case study- existing services)
- **January - August 2014** Research (interviews - qualitative approach and Data Analysis and Interpretation)
- **August 2014 - January 2015** Development (service project - use of service design tools and design thinking methodologies; service prototyping; pilot service; videos' edition)
- **January 2015 - June 2015** Pilot service (project implementation)
- **June 2015 - September 2015** Final project report and production of scientific articles.

Addressing Issues

- Hospitality
- Responsible tourism
- Interpersonal relations
- Intergenerational relations

Project Organization

The research approach is qualitative, exploratory and contextual. This study aimed to examine the viability of the proposed service in the elderly's context, in Rio de Janeiro's city. The research methods employed are: case study of existing services; interviews with elderly and potential service users (tourists); service design; and service prototype.

What Happened?

This project proposes a collaborative service between elderly residents of Rio de Janeiro and tourists through domestic

hospitality. This service model, focused on community, empowering the elderly and valuing their experience and their skills.. Based on the active ageing concept, this project focused on the unexplored potential of older people who lives in Rio and show the value of older people in their community.

This project is being developed by researchers of the Production Engineering Program of the Federal University of Rio de Janeiro - COPPE/UFRJ (DESI Group Brazil) and is being supported by FAPERJ - Fundação de Amparo à Pesquisa do Estado do Rio de Janeiro (Research Support Foundation of the State of Rio de Janeiro - Brazil) and CEPE - Centro de Estudo e Pesquisa do Envelhecimento (Center for Studies and Research on Ageing). ■





Chapter 7

A SELF-ORGANISED GROUP OF RETIRED FRIENDS IN SAENS PEÑA SQUARE, TIJUCA

By Carla Cipolla and Fernanda Zanela

This is a group of retirees found in Rio de Janeiro with an interesting and self-organised initiative, and good individual stories.

The definition of a NORC (a Naturally Occurring Retirement Community) is any geographically defined community in which at least 40 percent of the population is 60 years of age or older and live in their own homes. Our case study in Tijuca is not exactly representative of the NORC definition, but nonetheless is one.

The neighbourhood of Tijuca is inhabited

by approximately 24% with seniors, which corresponds to 39,531 elderly people in the neighbourhood – a significant number.

How did it Start?

Saens Peña Square is a traditional bustling square in Rio de Janeiro. In this place, interactions happen between people of different age groups. Approximately six million people circulate through the square per month. This square is located in the heart of Tijuca, a neighbourhood in the North Zone of Rio de Janeiro, Brazil.



Saens Peña Square



"Academia da Terceira Idade - ATI program" ("Academy of the Third Age ") in the Saens Peña Square.

About Saens Peña Square:

- It was inaugurated in 1911;
- It is located in th e Tijuca neighbourhood (this neighbourhood has 163,805 residents, 39,531 elderly);
- It is located in the main commercial and social center of the neighbourhood;
- Located near the Maracanã Stadium;
- Varied trade and fair crafts surround it;
- Retirees visit the square to interact, do physical activity, and enjoy leisure time;
- The samba school Salgueiro was founded in this square on March 1953 (the school had its origin in the Salgueiro favela when everyone came down to parade at Saens Peña public square).

Current Situation

There are benefits for the elderly and retirees in Saens Peña Square:

Outdoor fitness for seniors: “Academia da Terceira Idade Project”, a program of age-friendly physical activity in Rio de Janeiro. This project is to promote guided physical activity for seniors, using specific gym equipment to practice strength and aerobic training in public spaces, utilising areas such as squares and parks in the city. It aims to maintain and improve functional autonomy in the elderly - providing the strength to avoid falls or accidents, and furthermore creating social relations between the participants. Morning gym class: “Qualivida Project”, was a fitness program conducted in squares and public spaces of Rio de Janeiro, and focused on adults older than 40 years and the elderly. This project also includes activities related to cognition and personal relationships.

Engagement with Researchers

A particular group of retirees, whom attend the square every day at the same time are part of the doctoral research project of Fernanda Zanela (advisor Carla Cipolla) at the faculty of Production Engineering - COPPE, UFRJ, studying the relationships and formation of the group, looking at the quality of life these seniors.

Who are the People?

The formation of this group of retirees was facilitated by geographical proximity (all are neighbours). However this group of friends occurred because they enjoy the company of each other and similar activities. They have created a bond that leads them to the square every day at the same time.

A group of seniors (retirees) who live in Tijuca and Vila Isabel (neighbourhood nearby) go to Saens Peña Square at the same time every day to talk and play games together. This group has existed for almost three years, consisting of approximately 13 seniors: all of them are great friends. The group has a participant of 37 years old, who became part of the group because every day he waits for his wife to finish work in the square. He met the group there, and plays "purrinha"*** with them every day.

Every day, they arrive in the square at 5pm to talk, play spinning top, or purrinha. They don't visit the square on weekends or when it rains. At these meetings they also celebrate birthdays of group members together.

Most of them have lived in the neighbourhood for many years and have frequented the square. They met, found things in common, and today are a self-organised group. When playing spinning



Alcides, Joel, Paulo, Domingos, Anibal, Adhemar, Tiberio and Darcy

top, retirees draw the attention of people passing through the square. People stop to watch them play spinning top, if they want to participate, they are welcome. There was a case in which a senior from Paraíba (a Brazilian state), while on vacation in Rio, became a member group during this month-long stay.

All participants are men; the youngest is 62 years old and the oldest 88 years. Most of them are married and maintain contact with their families. The group is composed of Brazilians, but includes Spanish, Italian and Portuguese participants. These seniors do not take part in the services offered to the elderly in the square. A Rio de Janeiro news program told the story of this group in a report: www.youtube.com/watch?v=ErtcjHeZQuM.

***"Purrinha" is a traditional pub game in Rio de Janeiro, and is very popular in Brazil. The game works as follows:

- Can be played with two or more people
- Each player will have some small object (like pieces of paper or toothpicks) and should hide a quantity in his hand.

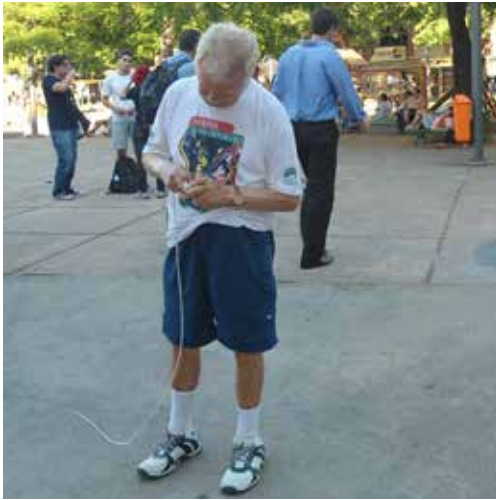
- Players must try to guess how many toothpicks are hidden in total in all the players hands presented.
- Players cannot repeat the guesses in the same round.
- The player that guesses the total number of toothpicks hidden in total in all the players' hands presented in the game, will win the round.
- The winner of the last round removes one toothpick and will play the next round with a toothpick less.
- The player who runs out of toothpicks wins the game.

What are they Doing?

The Department of Healthy Ageing and Life Quality (SESQV) promotes actions that contribute to the dignified, active and long-lived population ageing, spreading the culture of healthy habits in the city by encouraging the practice of regular physical activity through programs such as "Academia da Terceira Idade - ATI program" (Academy of the Third Age). The goal of the program is maintenance and improvement of physical functional autonomy, as well as promoting social relations between participants.

There are "ATI's" in several neighbourhoods in the city, providing care to 40,000 elderly people. The elderly who live in Tijuca also are attended by initiatives such as the "Centro Estadual de Referência do Trauma do Idoso (Ceti)" -





The players checking the points in the match



Darcy, Paulo, Domingos, Adhemar, Francesco, Joel e Alcides playing 'purrinha'

a trauma center for elders, Living Center for Seniors, and the “Universidade Aberta da Terceira Idade (UnATI)” – an open University of the Third Age. The Saens Peña Square also offers a subway station and several bus stops that take residents to most places in the city.

There is a social problem in Tijuca: the security. The neighbourhood is surrounded by twelve favelas, where drug trafficking moves a lot of money. The Government's response has been to install a Pacifying

Police Unit next to Saens Peña Square: in the Morro do Borel ("UPP Morro do Borel"), seeking more tranquillity and security for the neighbourhood.

Despite this, the retirees group continue to meet here every day at the same time and only have one request: would like of a surface more appropriate for playing spinning top.

Individual Ageing Stories

The story of the retired friends' group who attends the Saens Peña Square every day shows how the group used its relational skills to ensure living together, friendship, social inclusion and quality of life. A combination of a) public space, b) their knowledge and skills, c) will, d) friendship and e) activities they enjoy were the only resources. This group identified within their own context a self-organised way to promote an active and healthy ageing.

People passing the square can watch an example of how to age with quality of life. The story of each shows how strengthening ties in the neighbourhood, maintaining friendships and to be actively engaged in a relational service can be important during the ageing process. These are some group members:

Joel

Joel, 80 years old, is a retired banker. He is married and lives in Tijuca. He is part of the retired friends group and meets his friends at Saens Peña Square every day at the same time to talk and play spinning top and purrinha. Joel was the person who started playing spinning top in the group. Besides the regular interaction and daily activities, Joel always brings new activities, such as guessing games, to the group. Through

these activities, Joel interacts with people in different age groups in the square. Every day he brings spinning tops, the purrinha pieces and other games in a bag to the square. He brings spinning tops to lend to passers-by. When a friend, another group member, had a heart attack and underwent surgery, Joel brought a sphygmomanometer (a device used to measure blood pressure), concerned about the health of his friend.

All group members consider Joel highly active, always interested in bringing new things to the group. He is personally involved with his group, bringing knowledge, will and their relational capability: he is part of the service.



Joel and Tiberio

Darcy

Darcy is the youngest member of the group and still works as a lawyer, he is 62 and married. Every day when he returns from work, he meets his friends in the square and participates in group activities.

Darcy feels motivated to play spinning top with his friends, but its not the main reason that leads him to the Square. He goes to the square daily, mainly to meet with friends. Meeting his friends in the square is also a stress-relief activity for him.

He sees the square as a meeting place, believing participation in a group is important in the social life of any person. When he suffered a heart attack and underwent surgery, he received support and affection from his friends in the group. Even during recovery from surgery, he continued to go to the square to meet his friends.

Alcides

Alcides is 83 years old and is a retired trader. He is married and has lived in Tijuca for 16 years, and loves the neighbourhood. He originally comes from Portugal.

He plays spinning top and purrinha in the square to break with domestic routine and maintain friendships: he feels renewed! Alcides appreciates the bonds of trust, concern and care between group members. He also likes the pleasant surroundings with children playing.

He also enjoys going out dancing with his wife in "Casas Portuguesas" (Portuguese Homes) that are community centers of the Portuguese and Brazilians. These centers also



Darcy and Joel

aim to gather the native Portuguese through activities such as parties, themed lunches, classes and lectures.

Anibal

Anibal is 72 years old and is retired - he has worked as a bellman in Rio de Janeiro bus terminal, barber and market trader. He is married, lives in Tijuca and he is not Brazilian, he came from Portugal when he was 26 years old.

Anibal usually visits the square three to four times a week. When he met Joel, Paulo and Alcides in the square, he became part of the group and today, knows all of them well. He does not play spinning top with Joel and Alcides - Anibal only plays purrinha. He considers his time with the group in the square as leisure time. For him, friendship is fundamental to leisure.

Anibal enjoys walking, plays the accordion, and also plays cards with another group of seniors in the same square at different times. Like Alcides, he also attends the "Casas Portuguesas".



Alcides and Joel



Joel, Alcides and Anibal (wearing green shirt)

Remarks: Ageing Culture To Inspire Social Innovation

As a group of people with relational skills, these people created a network and are strengthening personal interactions within their community, ensuring social inclusion in old age. They developed a way to stay active by working together. ■

{STATS}

AGEING IN CHINA

- China, officially the People's Republic of China (PRC), is a sovereign state located in East Asia. It is the world's most populous country, with a population of over 1.35 billion.
- According to the special administrative regions (S.A.R.'s) of China including Hong Kong and Macau, there are three levels of cities, namely provincial-level cities (municipalities and S.A.R.'s), prefectural-level cities, and county-level cities.
- Retirement protection development in place.

Life Expectancy

(at birth as of 2014)

73.28 YEARS OLD

Median Age

36.7 YEARS OLD

Total Fertility Rates

1.79 BIRTHS PER WOMAN

Flag



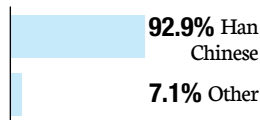
Size (sq.km)

9,388,211

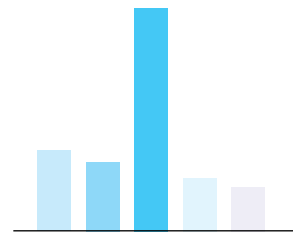
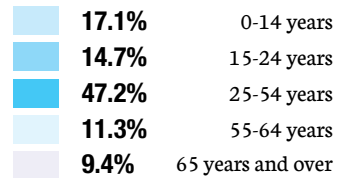
Population

1,355,692,576

Ethnicity



Age Structure



Retirement Age

60/55 YEARS OLD

RETIREMENT PROTECTION*

- 1949: A legal basis for the establishment of a unified, national labour insurance system.
- 1951: “The People’s Republic of China Labour Insurance Regulations”, which required companies to implement pensions, medical insurance and industrial injury insurance for their employees. This was China’s first social security law.
- 1984: The change was started in some rural areas first. The system was based on being “paid mainly by individuals, supplemented by the communities, and supported by government policies” and resulted in the accumulation of funds in personal accounts.
- 1997: Based on State Council Document 26 of 1997, the central government transformed the PAYGO system into a multi-pillar system including a funding scheme and outlined a national basic pension insurance system consisting of three pillars.

1st PILLAR

Mandatory

- Consists of two tiers: a social pool (a PAYGO system financed by employers, contributions are 20% of the employee’s wages) and an individual account (fully funded by employee contributions of 8% of their wages).

2nd PILLAR

Supplementary Occupational Pension

- A voluntary or supplementary pension benefit called the enterprise annuity. Both employers and employees can contribute to the fund, but only employers are required to do so. Contributions by the employer can be treated as costs for a maximum of 4% (or more, depending on the city) of the total payroll.

3rd PILLAR

Personal Pension Savings

- Consists of voluntary complementary pension savings.

* Sources: http://www.mn.nl/pls/portal/docs/PAGE/MN_CORPORATE_2011/CONTENT_MN/PDF_BIJLAGEN/PAPERS_EN_RAPPORTEN/POSITION%20PAPER%20CHINA'S%20PENSION%20SYSTEM.PDF

Chapter 8:

GOLDEN TSINGHUA: RETIRED SCIENTIST COMMUNITY

By Yanki Lee

How Did It Start?

As one of China's most renowned universities, Tsinghua University is an important center for nurturing talent and conducting scientific research. Following its motto 'Self-discipline and Social Commitment' and the spirit of 'Actions Speak Louder than Words', Tsinghua University is dedicated to the welfare of society and world development.

In addition to over 30,000 students and 10,000 staff members, there are over 50,000 residents living on campus who support staff members and their families. There is a kindergarten, primary and secondary schools and shopping centres to support the community. It works like a town. There are also over 7000 retirees living in the community.

Why? With pensions equal to half of their salaries before retirement, this group of retirees are financially independent. According to the research done by the university, a quarter of them are living with their children on campus.

Current Situation

Apart from their personal flats and facilities such as restaurants shared with students and current staff members, there are four types of extra facilities for the retirees:

Elderly Home, a transformed old courtyard house with eight rooms for frail retirees in need of intensive care. It is organised by the university authority as one of the benefits for retirees and is in high demand.

Elderly Centre, with activities for the older people. It is the first contact point for advice. It provides travel and medical check activities. It has a multifunction hall, sport facilities and rooms that retirees can use. Many self-initiated groups have been formed since the building was opened ten years ago.

University for the Third Age, which is different from other Universities of the Third Age since it is funded and organised by the university. A few staff members are retirees but most of the staff are younger people employed to run the organisation for the retirees. Similar to the U3As in the west, the teachers and students are retirees, i.e. retirees teaching retirees.

Tsinghua Association of Senior Scientists and Technicians is a totally self-initiated organisation that seeks to assist from the university authority. This has been given an office space with two retirees as staff members. There is a committee formed by retirees to manage the operation and network with other similar organisations nationally. Since the start in 2005, it has become a platform for retirees to continue to contribute their knowledge to external organisations as well as the Tsinghua community.

Engagement with Researchers

For this project, ageing in Tsinghua (黃金清華), a design researcher from the UK collaborated with founders of the Tsinghua Association of Senior Scientists and Technicians and different departments to explore the operational system(s) on a university campus where ingenious older people are living.

How well are they being looked after within the campus? This was the first research

How well are they being looked after within the campus?

question and the aim was to unfold the situation through design and social science methodology. According to the Quality of Life (QOL) Profile, there are three life domains, each of which has three sub-domains, consistent with recent definitions of health and health promotion as provided by the World Health Organisation (WHO) :

1. Being (who one is): physical being, psychological being and spiritual being
2. Belonging (connections with one's environments): physical belonging, social belonging and community belonging
3. Becoming (achieving personal goals, hopes, and aspirations): practical becoming, leisure becoming and growth becoming

The team adopted this QOL Profile as a framework to understand individuals' health and wellbeing in relation to the ageing experience. As Wilcock explained, 'many older people have a great deal of expertise to point the way to the maintenance or improvement of their own health, particularly as it relates to their physical, mental and social wellbeing. This differs from many in government and the health professions who deem the ageing population as health problems by relating health solely to the absence of disease or dysfunction'.

This reinforced the idea of engaging ingenious older individuals of the Tsinghua University campus and exploring their personal tactics to address the three life domains of individuals' physical, psychological, and spiritual functioning; their connections with their environments; and opportunities for maintaining and enhancing skills. This is what was called the ingenuity of ageing.

Who Are the People?

The familiar and connected community of Tsinghua happened because academic staff members are given apartments for life so that they can stay on campus even after they are retired. More important, this sense of belonging enhances the sense of safety, both physically and psychologically. Within the campus, they are respected academics, while outside they might just be 'old people.'

Tsinghua University is one of China's top higher education institutions, which has just celebrated its 100th anniversary. It features advanced facilities in science and technology with more than 30,000 staff members and students. Through the introduction of Professor May Pei, director of the Tsinghua Gerontology Centre, a unique situation was found: over 6,000 retirees still living on campus, many of them scientists who have respected social status as subject experts, as well as mentors of many China's current key political leaders in the Communist Party, the ruling party in the Chinese government.

What Are They Doing?

From different types of elderly facilities/organisations within the university campus, it is clear that the authority considers the needs of older people. However, the physical environment of the campus is deteriorating

with out-dated standards of accessibility and there are growing pressures on the authority's ability to manage the physical wellbeing of the 6,000 retirees. With limited experience and short-term planning, more problems are arising for the community. There are no extra resources from the authority to improve the 'belonging' and 'becoming' profiles of their constantly increasing numbers of retirees.

As the government struggles to resist a consensus, retired intellectuals in China are setting up different organisations of senior experts as part of a national movement of productive ageing. Their aim is to continue their life pattern of contribution to the people, party and nation. The Tsinghua Association of Senior Scientists and Technicians was founded in 2005 and together with other retired experts, they launched a website offering information for those over 50 and, more importantly, to provide a special web platform for retired experts to post their expertise and link with those looking for advice. Thus, they have developed their own ways to continue their work lives after the official retirement age.

Individual Ageing Stories

Stories from retired Tsinghuaians demonstrated that they have the ability of combining existing resources and especially within limited situations. The final attribute of ingenuity is to solve practical problems. They are working hard to make sure that they themselves are ageing well. They are also concerned about how their experiences can help others within the community and beyond. This is how they are also performing the roles of belonging and becoming.

Being (who one is)

Many retirees are keen to keep fit and are fully committed to maintaining their health.

They use their run-down apartment building (four to five storey block with no lift) and take their old bicycles to poorly accessible communal areas to maintain fitness and flexibility. For example,

Professor Ping-Pong – physical well-being

Professor Chen was an electrical engineer: since retirement 20 years ago, he has played ping-pong every day at 4pm. He is happy to play with anyone in the facility. He explained that, 'Playing ping pong is good for my body as well as meeting new and old friends!' In addition, he and his wife, who was also a professor of engineering, go to the Older Summer Palace, a national park next to the university, every morning. I visited the park with them one morning in June 2011, and Professor Yu said, 'We come here every day between 8am and 11am when it is the best time to take in oxygen for our bodies'.

Professor Singing – Psychological well-being

Professor Yu, the wife of this model couple on Tsinghua Campus, is not as fit as her husband, so she has developed her retirement life around singing. She enjoys singing with other retirees as well as performances at special events. She sang an English Christmas song for over 250 members from the Tsinghua Association of Senior Scientists and Technicians at their Chinese New Year Celebration party in 2011. For her, singing is the best activity for her physiological and psychological wellbeing.

Professor Green Ageing – Spiritual well-being

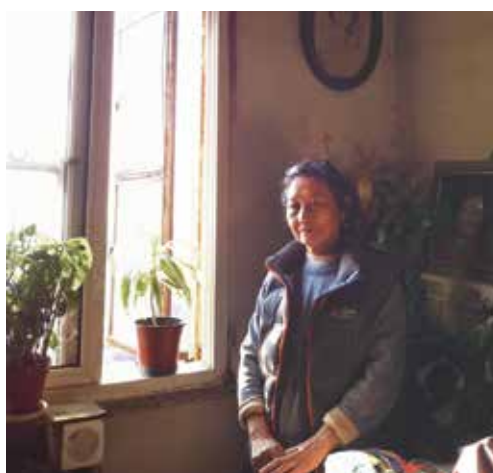
Another factor of importance to the retirees is spiritual wellbeing. Professor Lim is one of the pioneers in the Tsinghua community to promote green ageing. She was a professor in material science and wrote books about the subject with her husband, also a material



Professor Ping-Pong



Professor Singing



Professor Green Ageing

scientist. However, after retirement, she wanted to be greener. Now she spends half of her time in a rural area as an amateur farmer. She explained, 'Retirement means having freedom to me. At the same time, leaving Tsinghua Campus and the city means I can reclaim my freedom after contributing to academic knowledge and teaching over 40 years.'

Belonging (connections with one's environments)

The second level of the QOL profile is about the sense of belonging to community and environment. This group of ingenious older people grew up together as classmates, colleagues and neighbours. They also went through the political transformation of China and learning to live as a collective.

Professor slogans and blogging - Physical well-being

Communal sharing is sometimes more important than personal interests. Professor Liang who taught the subject of marketing before retirement, used his skills in marketing to share his adventures in maintaining his health through his online blog. He also transformed his personal experiences of ageing into slogans and calligraphies for home decoration for others on campus and beyond.

Professor physics - Social well-being

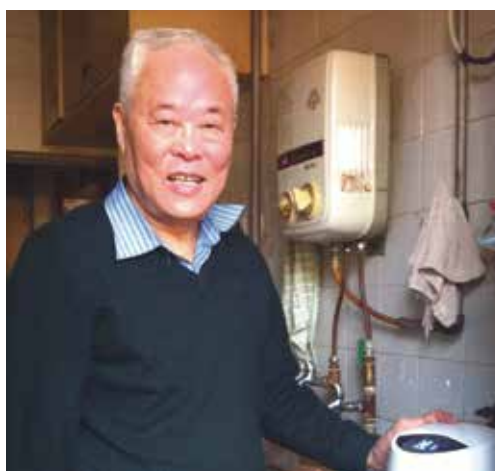
The other two levels of the belonging factor are social and community. I found two retirees' experiences that demonstrate these two sub-factors. For 40 years, Professor Mo worked as a nuclear power expert under the government's agenda and contributed to military development. Retirement also means freedom for him, where he can work on self-initiated projects related to his own expertise. Originally trained as a physicist, in his second year of retirement, he invented a



Professor slogans and blogging



Professor physics



Professor oxygen

new method of X-ray body scanning, which got a national patent with investment to continue research for its applications. After eight years, he received a second round of investment and is working with young researchers to develop new social applications of this technology in the healthcare domain.

Professor oxygen – Community well-belonging

A secondary school classmate of Professor Mo, Professor Wang's experience of his own self-initiated project had a more difficult path. As a trained chemist, he was also given the task of researching nuclear development during his whole academic career. After retirement, because of his own health, he started to research oxygenation, especially through eating and drinking. He called the liquid form of oxygen Fitness Oxygen, which was patented nationally.

All the research was done in his own kitchen or laboratories at his previous department outside of school hours. More importantly, he used his own body for the first test of his invention. He got support from a voluntary elderly group (including retired medical experts, professors and physicians) to help him to conduct a long-term trial. He aims to prove that this new product could help our bodies to get many health benefits. After ten years, it is still in limited production because it is an alternative health care concept that requires formal clinical trials. However, he has a blog that many people read every day.

Becoming (achieving personal goals, hopes, and aspirations)

At Tsinghua University, the concept of becoming is really about actions that go beyond individual expertise to transfer knowledge to everyone so that others can age well.

Professor English – Practical becoming

Professor Fan was a professor in linguistics. She enjoys her retirement life, and has joined singing and dancing classes organised by fellow retirees. Her additional role is as a living dictionary and translator for the retired community because she is very fluent in English. She is spokeswoman for the community and links to the external world. She also helps the university to welcome foreign visitors. She is still very active in discourses on international linguistic development and constantly exchanges emails with overseas scholars.

Professor style – Leisure becoming

Professor Yu of Style is also well known in the community. Before retirement, she was a professor of micro-electrical engineering even though her original field was chemistry. She once expressed her viewpoint of current



Professor English

education, 'Students are now trained without hands-on ability and they are incapable of solving diverse problems outside their own expertise... however, when we studied, we were trained with the principle of problem solving and hands-on ability that can apply to any subject.' Since retirement, she has been working as the office manager for the Tsinghua Association of Senior Scientists and Technicians where she has promoted active engagement with external organisations and current students. For leisure, Professor Yu is a wardrobe stylist for many female administration staff members. She also spends taking care of her aged mother.

Professor work - Growth becoming

Professor Lim from the Architecture Department has been a key collaborator throughout the process. His role evolved from passive subject to active partner, even adviser at some points. As a scholar, he continues to write essays to address ageing regarding to his own profession. For example, recently, he has been researching green rooftop technology and has found a retired engineer who is building an ever-extending house with fruit and vegetables growing on the roof. When he was the vice-chairman of the Tsinghua Association of Senior Scientists and Technicians, Professor Lim initiated and edited two books of stories about ingenious older people from other countries. He gradually became an advocate of productive ageing and campaigner for job opportunities for retired people.

Remarks: Ageing Culture to Inspire Social Innovation

As a group of ingenious people, they are working and stimulating each other to tackle persistent myths about old people, a culturally based fear of ageing. It is clear that this unique situation of collective living has



Professor style



Professor work

become an incubator that allows innovations to happen. They are constantly developing ways to maintain quality of life (being, belonging and becoming). Working together with this group of ingenious older people, this study explored their lifestyles to prove that ageing could be seen as a culture that we can draw lessons from and will support our own ingenuity of ageing. ■



Chapter 9

DESIGN FOR WUXI ELDERS: LIHU COMMUNITY AND SHANGXIAN COMMUNITY

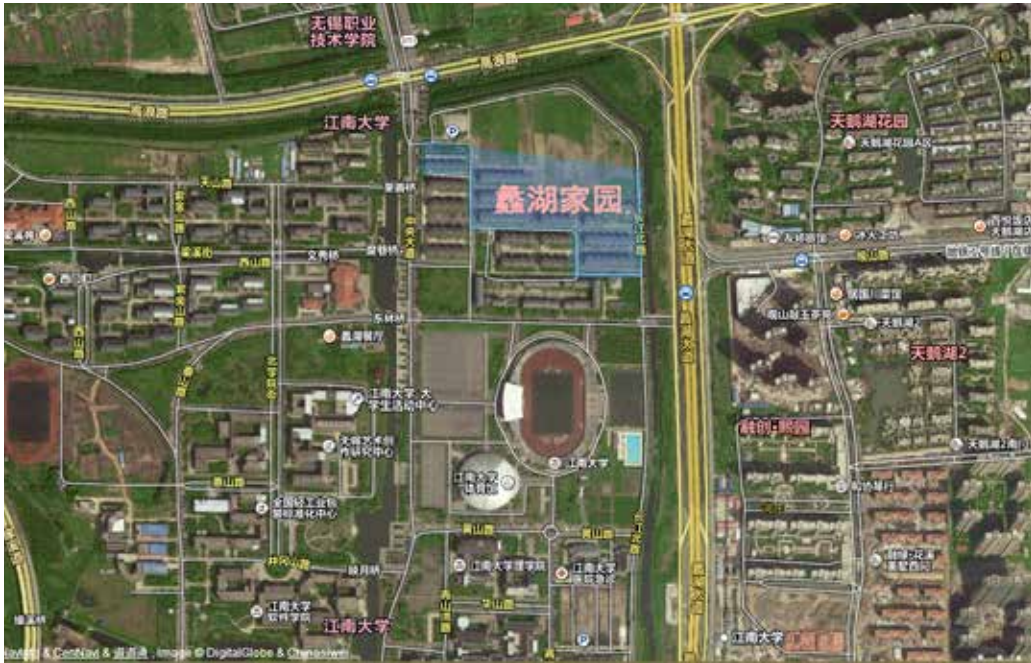
*By Miaosen Gong, Nansi Van Geetsom,
Francesca Valsecchi, & Wenqing Lv*

Ingenuity – People's Stories

NORC 1: Lihu Community **How Did It Start?**

Lihu community is part of Jiangnan University, in the direction of the Taihu Lake. Jiangnan University is one of the national key '211 projects' universities. After one hundred years of development

since its establishment in 1902 it is now a world famous university. The new campus of Jiangnan University named Lihu Campus is located far away from the city centre, occupying 3200 acres, and there are 30 thousand teachers and students living on campus. Lihu Community is situated in the north of Lihu Campus; it aims at providing a short-term residence for foreign students and young teachers. Covering approximately



NORC 1: Lihu Community

86 thousand square metres, it has now 755 resident families, among which nearly half are elderly people. In fact, on the consideration of taking care of the family and children as well, the grandparents move from all around the country to live together with their families in Lihu Community.

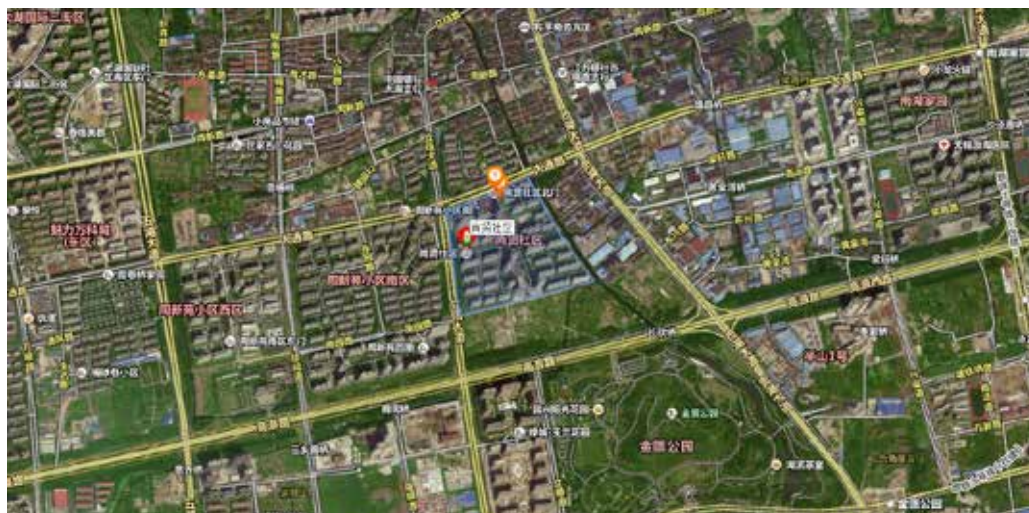
Current Situation

Belonging to Jiangnan University, Lihu Community is managed by the Householding Department of the university. Since it is not a traditional residence community but a short-term residence, the construction only took into account the teachers' basic needs, but not those of the elderly people. It results in the lack of an activity centre or facilities for them in the community, as instead it is common in typical Chinese residential neighbourhood (training centres, leisure and

entertainment equipments, social services, etc). Elderly people therefore have to choose other nearby residence communities or the campus for daily exercise and entertainment. It is not convenient for them, and more and more elderly people are requesting a space for activities in Lihu community.

Who Are the People?

The large majority of these elderly people in Lihu Community are not local; they come to the community to take care of their grandchildren and to support the families. Some of the others normally stay for short-term visits to their families, and some are retired teachers. For those who take care of kids, they focus their time and energy mainly on the children, which leaves little leisure time for their own activities. Commonly, they chat with each other when watching the kids



NORC 2: Shangxian Community

playing around outdoors. Since their sons or daughters are usually busy with work as teachers, the elderly can hardly communicate with them even under the same roof. And for those who are here for a short stay, they prefer to live in their hometown, where there are old friends and relatives all around for communication and entertainment.

What Are They Doing?

Elderly living in Lihu community is thus either taking care of grandchildren, or enjoying retired life. How they spend their free time basically depends on how much they should look after their grandchildren. If the babies aren't old enough to go to nursery, the elderly will have to stay with them almost all day long, and thus rarely have time for their own activities. On weekdays, they usually take the kids out for walks around the campus before the daily meals. During the weekends, parents have more free time to accompany the elderly and the children, such as driving to the nearby supermarket for shopping or going out for relaxation

For those whose grandchildren are attending school, and those who are enjoying life without grandchildren, there is plenty of free time at their disposal. They like doing morning exercises and going out for a walk after supper. But as already mentioned above, the lack of an activity spaces makes them go to nearby residence communities to enjoy their time with other elderly residents there, such as square dancing. In contrast to males, females are more willing to initiate social interactions with one another.

How Did It Start?

Shangxian community was established in April 2010, located in the central area of Taihu street in Binhu District and neighbours the administrative center of Wuxi. The community covers an area of 0.56 square kilometers, a total of 4650 residents of households, a resident population of more than 12,000 people.

Shangxian community is the first resettlement community of Taihu street. Its main body is the original DongQun village.

Most families have experienced the change of family structure from extended family to independent and separate one. Children live separately from their parents and therefore the elderly gather in the community.

Current Situation

Shangxian community: as the first resettlement community in its subdistrict, Shangxian has two main characteristics, one is, most families in the community changed from original extended family to economic-independent small family; the other is, most residents here are relocated households and tenants. The relocated households are from different villages and tenants are mainly outsiders.

Correspondingly, there arise two main problems. Firstly, with the change of family structure, the traditional folkway that thinks highly of kinship and cares little about benefits and wealth has been diluted gradually. Adult children only support their ageing parents on economic level and care less and less about affection of relatives and filial piety. Secondly, most residents don't know each other and rarely have connection or interaction, which makes conflicts easy to arise.

Based on these conditions, the community committee setting "filial piety" and "mutual aid" as the theme, in order to lead the community children to respect, to cherish and to requite parents consciously, as well as increases the chances of communication and fusion for the residents, and form the atmosphere of helping each other.

Since 2012, Shangxian has led public welfare teams into community service and management, holding a series of activities for residents. For example, hosting traditional

culture lectures, setting leisure chairs, creating opportunities for neighbours' co-cooking. By all of these means, cultivation of harmonious relationships between residents and a warm community is achieved. "When walking tiredly, I just sit on the leisure chair, chatting with neighbours. It makes me regain the feeling of dropping around and chitchatting with acquaintances before moving here." Said by Wangyu Zhen, who is a resident over 80 years old.

Who Are The People?

Built in April 2012, Shangxian is the first mixed community in the resettlement area in TaiHu street. The majority of its population are villagers from original DongQun village, likewise many migrant workers rent houses here. Most families have changed from extended family into financially independent ones. Though moving into modern community, the villagers' habits and opinions don't change. Migrant workers, as the main tenants in the community, also bring a frequent population flow. Those facts have brought great challenges to the community management.

What Are They Doing?

In Shangxian Community, the elderly usually have entertainment activities in the community recreation room, such as watching TV, playing cards and mahjong, chatting, etc. In addition, the residents also actively response and participate in the brand construction work of the community. For example, during the "mutual help" theme activities, the elderly take part in "loving kitchen courses", "celebrating birthday for centenarians", becoming more and more familiar with neighbours, starting to regard the community as a big family. But at the same time, what we can't ignore is that there

are still a certain proportion of aged people feeling lonely.

Individual Ageing Stories – About Your Grandparents' Stories

The old people we observed and interviewed during field research tend to show some common features so we put them into several types.

Type 1: Engaging Social Interaction

1.Mrs. Wang

Age: 65

Previous career: professor

She has joined the Elderly University to study chorus, calligraphy and dancing for several years. Satisfied with the staff and environment of the university, Mrs. Wang prefers to get some new knowledge with other elderly friends than to stay at home. The full life and fun activities of the university bring her a cheerful mood, which also reduces the burden on her children to take care of her.



2.Mr. Yang

Age:69

Previous career: accountant in a factory

Suffering a mild heart disease, Mr. Yang pays much attention to health. He keeps on getting up early in the morning to do some physical exercises. He goes mountain climbing and drinks tea for having a rest on the top of the mountain. He also plays cards

and sings with his friends. Mr. Yang believes that climbing is helpful to his health and he loves this life style.



3.Mrs. Qu

Age:63

Previous career: farmer

For several years she has been organising a drum team in the Vanke Community. In her spare time, she manages rehearsals 2-3 times a week and leads the team to participate in some performances held by other communities. She is interested in participating in outdoor activities, such as square dance, Chinese folk dance, Tai Chi and fitness ball. She always has a cheerful mood. If there is a chance she also wants to learn gardening, singing, calligraphy and photography.



Type 2: Developing Interests and Learning

4.Mr. Zhang

Age:70

Previous career: worker in a factory

Mr.Zhang has insisted on doing morning exercises in the park alone for six years now, no matter the weather. During exercises he has made some desirable acquaintances. Now he owns a good health and a pleasant mood to this healthy lifestyle.



5.Mr. Jiang

Age:76

Previous career: farmer

Mr.Jiang lives with his wife, while their children are working in another city. Ten years ago, he had had a life-threatening disease, after that Mr. Jang paid much attention to physical exercise. He likes playing cards and has some partners in his community. He says that playing cards can let him relax and know others' lives, and it is also helpful to keep a pleasant mood.



6.Mrs. Zhu

Age:75

Previous career: farmer

She lives with her husband, her children come back to see her every weekend. Mrs. Zhu's favourite activity is square dance. She has made friends with her regular partners, with whom they found some delicious restaurants in spare time. Due to an accident in her early ages, lumbar health is a big problem to her. Mrs. Zhu receives the therapy of magnetic resonance 2-3 times a week; she also often watches TV programmes about health maintenance and advertisements of physiotherapy. In her opinion, the happiest thing is the good health of families.



7. Yinfa Gu

Age:67

Previous career: individual business

Every morning, he will go to Xihui Park to play diabolo. Several years ago, when he saw someone playing diabolo, the happy memories of his childhood were called up. So he started to play diabolo again after decades, believing that it can increase blood circulation and improve the coordination of limbs. Furthermore, playing diabolo does not only enhances his physical fitness but also stimulates his mental fitness.

Mr. Gu says that after playing diabolo his diseases were brought under control.



Type 3: Taking Care of Families

8.Mrs. Su

Age: 65

Previous career: farmer

Mrs. Su, whose hometown is a small city in the northeast of China, came to Wuxi to take care of his grandson. She returns home when her daughter has a holiday.

Although she sometimes plays Mahjong in the community with other elderly people, she still misses her hometown Mahjong partners. Mrs. Su and her husband don't communicate much. And due to the language barrier she has less chance to get in touch with other elderly in the same community.

Taking care of her grandson makes her stay at home most of the day and she can't go out too far. Mrs. Su says that she doesn't well adapt to the city life, so she wants to return to her hometown as soon as her grandson will be a grown-up.



9.Grandpa and Grandma Chen

Age: 80/72

They have a daughter who works as a teacher at the in Jiangnan University, and a granddaughter who is a student at the School of Science and Technology at the same university.

The granddaughter comes to their home from time to time. Grandpa and grandma knew some friends after moving to Lihu community, but they are not satisfied with the fact that there is not activity area for elderly. Grandpa likes jogging on the playground of the University every morning, and after dinner they take a walk around the community. Another interest of grandpa is playing chess online in his spare time.



10.Mr. Li

Age: 63

Previous career: farmer

His daughter is a teacher of Jiangnan University. He and her wife came to Wuxi to take care of their grandson in 2011.

He gets up at 5:30 every day and at 9:00, after breakfast, he takes his grandson for a walk. Dinner is at 4:00pm and after that he takes his grandson out and comes back at 8:00pm. His daughter is currently working in Germany, and his son in law has a heavy manual labour job. Despite this, he will drives them to supermarket at weekends.

Mr. Li thinks that the grove near the East Playground can be converted into an activity place for elderly and children.



Type 4: Retiring Syndrome

11. Mr. Zhu

Age:81

Previous career: fellow of the Institute of Mechanics.

He lives alone, having a son studying overseas. Due to physical problems, he can't move, and a nurse is taking care of him. The time when the carer takes him out to chat with others and soak up the sun is the happiest time for him every day.

His daily life is a settled routine, which makes him feel unfunny and dull. He misses the busy and fulfilled days when he still worked with enthusiasm.



Remarks

Our research demonstrates that there are quite a lot of immigrants among the old people in Lihu Community helping their children by taking care of their grandchildren

and doing the household duties. On the one hand, their free time is limited; on the other hand, the aged lost their social relationship network based on the locations, moving from a familiar community into an unfamiliar community.

It's not easy for those immigrated elderly to develop a new network in a city community due to various reasons, which made their leisure activities ordinary and their activity field reduced. The aged people in Shangxian Community are freer. If there's nothing to do, they will feel very dull. Although there are many resources of activities, the true effects are still under discussion. In the two kinds of communities above, the level of the elders' needs is different because of their different tasks, and also partly because the pressure they face is different. The elders' needs in material aspects are not very comparatively high, but whether the needs for spiritual aspect are satisfied depends on the life quality before and after retirement.

2. Design – Designers' Responses

Introduction

Project participants: 18 post-graduate students in Grade 2, 7 post-graduate students in Grade 1
Tutors: GONG Miaosen, VAN GEETSOM Nansi, VALSECCHI Francesca

This project originated from the Product Service System Design (PSSD) (Manzini, Vezzoli, 2003) course in the School of Design at Jiangnan University. We used this course to build a research platform and worked together with some partners. They are: DESIS China, DESIS lab and Thomas More University College, Interior & Design Department in Mechelen, Belgium (GIDE network).

The PSSD course is for post-graduate students who are in any design field, with a strong motivation to work on design research, user-centred approach, and making design prototypes. Since 2008 the School of Design at Jiangnan University is proactive in the diffusion of PSSD classes; along the years we have been experimenting a variety of topics for design exercises, and we collected, together with a significant amount of students' projects and case studies, some lessons for the future.

Course/Project: Product Service System Design

Participant: 25 postgraduates from multi-disciplines by 6 teams

Lecturer team: 3 researchers and professors (Industrial, Interior and Communication Design)

Duration: April - June, 2013

Process:

- Introduction and field research
- Data analysis and problem definition
- Idea generation and user research
- Concept and development
- Prototyping and delivery
- Dissemination of outcome

Result: 6 proposals

City/Country & Timeline

Wuxi/China

Research to find problem (April 9 to April 18, 2013)

Concept and Development (April 24 to May 16, 2013)

- Problem definition
- Deep research & choose context
- Conclude all the data & come to the conclusion
- Concept description
- Final design work

Dissemination of outcome in Wuxi at the Redesign Design Education International Conference (May 22 to May 24, 2013)

Dissemination of outcome (25th February to 9th March 2014) at the GIDE international exhibition in Mechelen, Belgium

Research Methods and Design Approaches

In the PSSD course there are several issues to be all taken into account during the design process like the expectation that PSS should be human-centered, experiences oriented, problem-based, solution oriented, multidisciplinary, sustainable and innovative. PSSD is also related to other design evolutions like strategic design, big design, multidisciplinary design and social design. It is important that a PSSD learner understands fully where to situate his work field and how it is differentiated from other disciplines. Some PSSs are product-based, and some are more user-oriented, focusing on change or results or on specific needs. The course also offers a profession-based PSSD-learning environment that is accomplished in many ways. For example as follows:

- A competence-based (learning outcomes

based) curriculum/programme/modules and evaluation methods;

- Contacts with the PSSD- stakeholders through desk-research and field research; (Research teams use questionnaires, interview and observation to understand what the real problem users face to. After analyzing all the data, the student teams define the designing problem)
- Use visualization tools to transmit the complex service experience to different stakeholders (Such as mood board, storyboard, system map, customer journey, motivation matrix and prototyping)
- The participation in (international) design competitions and exhibitions; (2013 Re-DESIGN DESIGN EDUCATION CONFERENCE in Wuxi and 2014 GIDE exhibition in Mechelen, Belgium)
- Organising the course with a professionally qualified team of lecturers that reflects the multidisciplinary design practice of PSSD.
- Contacts with the design work field through study visits, field trips, workshops or seminars.

Addressing Issue(s)

1. Current situation of domestic ageing issues
In the modern society, the old-aged supporting resources contain economic supports, health maintenance, spiritual comfort, and care for the elderly life. It is the plain truth that the concept of a family-supporting pension from the traditional agricultural society needs to

be updated. At the same time filial piety must be endowed with a new content. In modern times, the insurance for old age, including social guarantee, takes much of the responsibility for the old aged, which could not wholly displace family support of the elderly. The social service system for the elderly guided by the government and involving, all the society should take more and more responsibility instead of the government alone. A service system for the elderly realizes socialisation, including the participation of the government, enterprises, social organizations such as the volunteering organizations, volunteers, and communities, all sharing the responsibilities (Huang, 2012). It was always the key attention, forced by the national policy and all circles of the society, to protect the economic and social development progress from the social problem of the ageing population and to create a healthy and high-quality elderly life.

2. The life quality of elderly people in the process of urbanization
The current urban elderly people consist of two groups. One part are elderly inhabitants in cities, the other part are the immigrated elderly from other regions. With the increasing speed of urbanization and population mobility, the increasing number of elderly people who immigrate to another region has become a significant social phenomenon. As the residents come to their old age, they most likely move to another city to live with their children or in pursuit of a higher life quality. In China, there are four types of elder people who want to migrate to another place:

“Dependence type”, some of them want to rely on their children and live together,

“Supporting type”, they want to help their children to live a better life,

“Life Quality type”, they are always in pursuit of a higher life quality;

“Hometown type”, they move back to the place where they were born.

The main common features of the four types of elderly people are as follows.

Life quality of the elderly people who moved to a new place is influenced by the adaptability, new social network, and financial capacity of their children.

In China, currently there is no policy to support these elderly people; their needs and difficulties should be particularly noticed by our society.

In addition to the policy support from the government, life quality of these elderly people is also influenced by some non-institutional factors, including (1) family support, financial support and family care, and (2) neighbour support. The social network of older people can largely influence their social support. Contact with friends and relatives can provide these elderly with emotional encouragement and life support, can reduce the need of formal care services and create a good cultural environment to live in. (3) Home-based care services in communities include health services, life caring, culture and entertainment.

3. How to improve subjective initiative and related skills of the elderly

There are two common attitudes towards getting old: “Refusing to recognise that you are old”, that lead to the attitude to always participate in various social activities, and “Accepting”, that instead displays the attitude to be more

dependent on others and often suffer from depression.

In this regard, a series of educational activities should be held by communities to help the elderly to get a more positive attitude towards life. The community-based education activities for these elderly people can spread knowledge and train life skills. Organising entertainment activities for the elderly people with the same hobbies will help them to build up a social network and to get better communication with each other. As a large number of elderly people are knowledgeable person, the communities can set up organizations for elderly to exchange knowledge or skills, and this may even create opportunities for re-employment. Furthermore, we can encourage elderly people to participate in public welfare activities, and they can find their own social values and establish confidence in the process.

Design Challenges

Field research is the first step of teamwork in order to understand the local context with real experiences and builds the foundation for further design response. We did preliminary investigation on living facilities and environment, and had interviews with the elderly and their families, and managers of elderly activity centers of the two selected communities. After sharing the data of the preliminary field research from each team, by analyzing and discussing, we clustered and selected four profiles of elderly as our main target. And each team respectively carried on further research for the profiles on different aspects like family situation, physical health, mental health, everyday life, entertainment, and etc. Then the four profiles of elderly were defined to demonstrate the scenarios of their

lifestyle, problems and also opportunities.

Native activist: This kind of elderly persons refers mainly to retired citizens and when they retrieve from the household support for the family or kids. With varies of interests and skills, they often participate in all kinds of physical exercise, social interactions and elderly college. They are good at time management or managing time and self-activity arrangement or self-arranging activities to maintain their regular friends circle.

Problems: the identity and perception of elderly limits their contribution to communities and society.

Opportunities: they have good capacity and intention if a space and platform is generated.

New immigrant: They move from their hometown to a new living environment to live with their sons/daughters and/or support their baby care and household. On the one hand, they are eager to make new friends, to adapt to the new environment, but on the other hand, they will encounter the problem of language communication and trust, and the understanding of local living facilities and services.

Problems: Inconvenient communication because of different dialects, mistrust of strange people, and no better way to get more information.

Grandparent baby sitter: They live together with their children, and some of them may live temporarily from their hometown. They spend most of the time on taking care of the grandchildren or the family.

Problems: The fragmental time and lack of community facilities and services.

Opportunities: To integrate the internal and external resources, and to create appropriate activities for the elderly to offer social communication and learning opportunities for them.

Retirement Syndrome: This profile mainly refers to those with difficulties to adapt their mental and everyday life from before retiring to after. They lack self-validation and seldom take part in social activities.

Problems: Safety issues, transition from working status to retiring status, self-recognition and recognition from the outside world

Opportunities: To take advantage of the characteristics and strengths of elderly people, to encourage them to gain what they need by contributing what they can, and to realize their values by taking part in activities, and thus leading a better sunset life.

Design Proposals

We propose 6 proposals (see table overleaf) focusing on different aspects of ageing lives. Generally they share the belief that the elders' basic survival needs have been satisfied. And the proposals search for ways to improve their current living condition by meeting their unsatisfied needs or exploring new forms of existing activities.

After classifying the four types of elderly, each group focused on one aspect to do the deep research and tried to develop some concepts to solve these problems. However, given the limited top-down resources, the

Proposal	Service Idea
GG Co-learning	A co-learning collaborative service for elderly people and their grandchildren in Lihu community.
Happy Sunset Red	An online platform to make some interactions and mutual services between young students and elderly people.
Gather+1	An open service guiding elderly to join activities in Xihui Park smoothly by offering opportunities to find companions and information.
First Aid	An updated first-aid service system for the elderly incidents in park by a park card as electronic ID.
Bondlink Community	A service system in which the elderly and young living in the same community can exchange their services to make more chances for social interactions.
BriAGE	An interactive platform to connect the elderly people and some children in hospital whose parents are not always by their side.

Service ideas of design proposals

possible solution could not depend on the government budget that much, instead the design team have to rediscover bottom up resources and opportunities to develop innovative solutions. Therefore, the real design challenge and strategy is to regard elderly and their surrounding and network as assets and resources (Nesta, 2012), and to empower them to involve the solution as co-producers by enabling platforms and solutions. What follows are the 6 student teams' proposals.

Proposals/Service Idea

1. GG (Grandparents and Grandchildren) Co-Learning

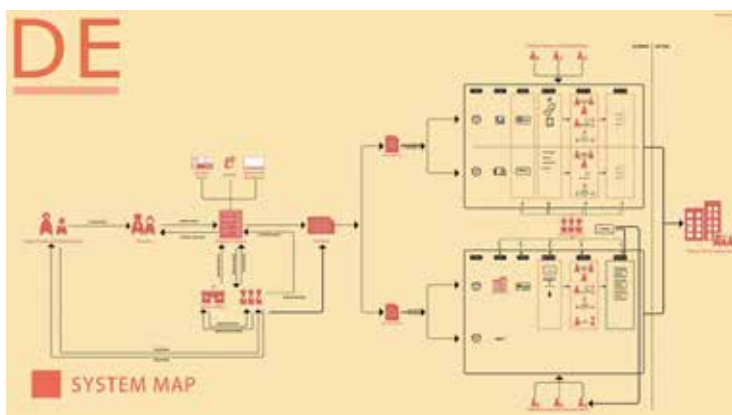
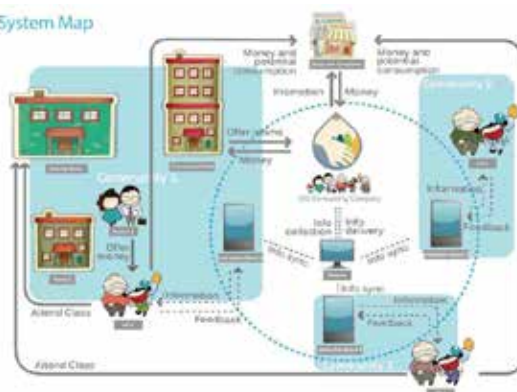
Problem: Spending most of time on taking care of grandchildren, those elderly can hardly have time to learn what they are interested in. Meanwhile, some schools for the elderly are offering learning opportunities and resources. They have difficulty in getting profit. They need appropriate ways to promote their activities.

This design aims at creating learning opportunities for this type of elderly. We would introduce an independent business model to promote products or services by offering learning opportunities to both elderly people and their grandchildren. By doing this, a business can attract potential clients in the community. Meanwhile, the elderly and their grandchildren can easily get access to various classes.

2. Happy Sunset

Problem: Elderly people who moved to Lihu Community to take care of the kids or families are lacking communication with other people and always feel alone.

Happy Sunset creates a more smooth and easier way of communication and interaction. It makes full use of the resources: school office, students' organization, parents, grandchildren and the elderly people. With the website platform online and real-life activities, these five stakeholders can play their own roles and fulfill others' needs. They can communicate with each other online and



design some activities. After finishing offline activities, the elders and student volunteers can also upload some photos to the Happy Sunset Website, and others can create their own activities with the feedback. The elderly people can enjoy their lives using this service, and it will provide a balance to elderly people and young people in the same environment.

3. Gather+1

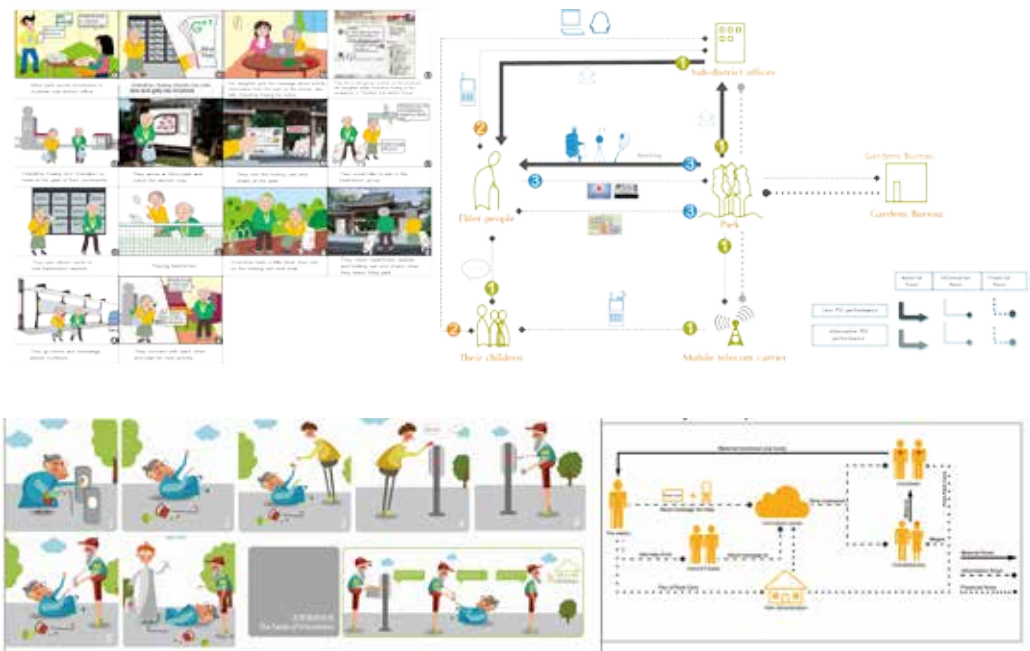
Problem: XiHui Park has a large visitor flow a including six functional zones such as an entertainment zone and a fitness square, with many self-organised activities. Elderly people, especially newcomers, cannot get overall information about existing activities and how to find companions.

This product service system design aims at guiding elderly to join activities in Xihui Park smoothly. It offers opportunities to find companions and informs about the facilities

by information brochures, electronic maps, mobilizing Subdistrict offices, (elderly) communities, communication by mobile telecom carrier and the help of their children.

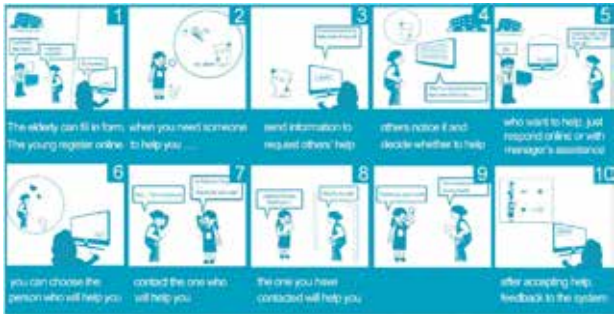
4. First Aid

Problem: Elderly people are prone to accidents when they do the morning exercises in the park. So the protection of the elders' life safety is equally important. The design uses an upgraded Park Card as electronic ID and health information card, a Park Information Center - First Aid Clinic and intelligent First Aid Kit Stations installing at several key places in the park. It provides a trained group of First Aid volunteers to assist injured and provides a smart information system to park visitors. The design makes full use of every minute in order to help injured elderly people in time.



5. Bondlink Community

Problem: When families get together, the elderly could not take part in the conversation because they share few common topics with the young. In daily life, elderly people who live alone feel it is hard to find helpers when they face difficulties. We build a service system in which the elderly and young living in the same community can exchange their services to make more chances for them to communicate. Elderly people can use the website to send message online for help, and then some young people can get this message and organise some mutual help activities. By this way, we can make full use of the human resources and promote the interaction between generations.

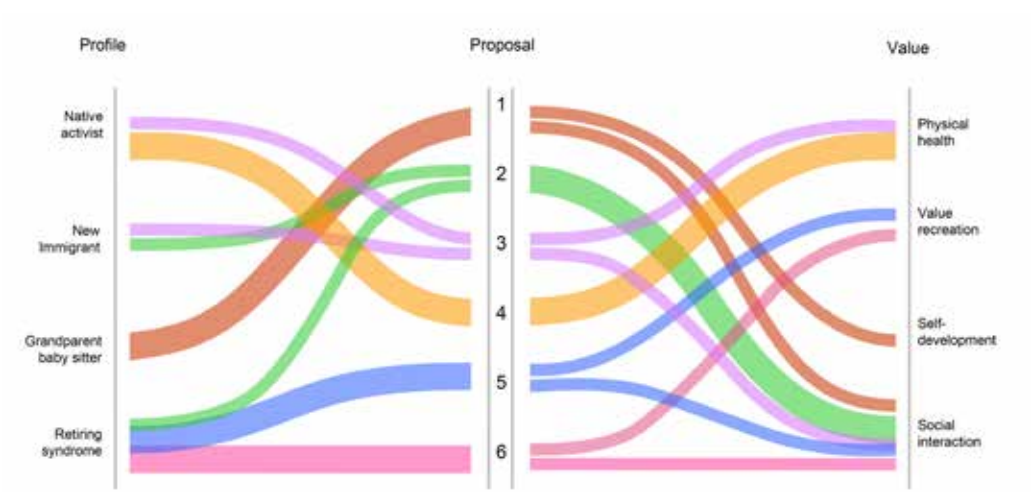


6. briAGE

Problem: The life of elderly people is filled with loneliness and boredom after retirement. Sometimes, they feel that they are useless and too old to be a part of the society.

This design wants to create a desirable life experience for the elderly people. It builds an interactional platform to connect the elderly people and some children whose parents are not always by their side. It also can empower the elderly people to learn different skills. The design enables the elderly people to interact more with society during the period of taking care of children, and it helps them to find their lost feeling of young and passionate, and regain their sense of value.





Connection between the profiles, proposals and values

Conclusion

In conclusion, for the elderly, the above design responses have achieved the meaning of improving physical health, recreating personal value and enhancing the social interaction and promoting the self-development. Specific corresponding conditions shown in the table above.

Physical Health

Outdoor activities in parks are a good way to keep physical health for the elderly. However, the elderly are vulnerable while the parks' facilities and environment are imperfect due to potential dangers. The proposal "FirstAid" builds a product service system to provide a feasible way of timely assistance for the elderly to guarantee the safety. Some elderly people, especially the new immigrants, are confused with the park's environment and experience that is not easy to assimilate into existing activity groups. The proposal "Gather+1" provides new ways to eliminate the information barrier between elderly people and Xihui Park. It increases the accessibility of information to support

elderly people to choose different activities, and to build a circle of elderly with common interests.

Self-Development

Continuous learning and enrichment of knowledge is a wish of most elderly people. It can promote psychological health and slow down the process of perceptual degradation for the elderly. So the proposal "GG co-learning" provides a co-learning experience for both the elderly and children. It brings a new business model into community and of co-learning with grandchildren. The system also provides a way to let elderly people achieve self-growth and self-development.

Social Interaction

The social networks of retired people have changed when they leave their long-term work, so they often experience loneliness, emptiness and have negative emotions.

The lack of social interaction is a big barrier. So there are Five proposals have the intention to promote new ways of social interaction for them. They help the elderly to make new friends, expand the interpersonal relationship network and reduces negative emotions. At the same time, they aim at bringing elderly people some social connection and enhances personal resources, so that they can face the disease and life problems more pro-actively. In addition they and also provide some psychological support and create the ability to adapt to society.

In modern society after industrialization, with the progress of urbanization, individualization and cultural westernization, the social-tech system of the Chinese society changed a lot. Resulting in the dramatic change of the external social context and also the internal mental condition of the elderly, consequently, the situation and life quality of the elderly has largely declined. Instead, The negative perception of elderly has been largely diffused: they are outdated, stubborn, useless, lonely and so on. The design concern of this programme aims at is how to improving the quality and value of being elderly and how the elderly are being perceived by society. Certainly, we can't go back to the ancient society to restore the traditional social context, favourite for elderly. Therefore, the opportunity or necessary strategy is to upgrade the way of being elderly. By changing the lifestyles and the idea of wellbeing of elderly people, the elderly lives can get new qualities.

Acknowledgments

We extend our sincere gratitude to all the participants, users and partners of the programme. The research is partially supported by Ministry of Education Humanities and Social Science Youth Fund (11YJC760018) and the Fundamental Research Funds for the Central Universities (JUSRP51326A). ■

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AGEING IN DENMARK

- Nordic country located southwest of Sweden, south of Norway, bordered to the south by Germany.
- Copenhagen is the capital and most populated city of Denmark (the second largest in Scandinavia). Founded as a Viking fishing village in the 10th century, Copenhagen became the capital of Denmark in the early 15th century.
- Retirement protection in place.
- Pension scheme in Denmark is three distinct pillars, which consist of three tiers: a basic social old age social pension, occupationally related supplementary pensions and private pension savings.

Life Expectancy

(at birth as of 2014)

79.09 YEARS OLD

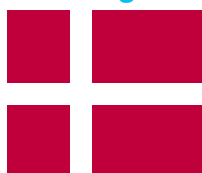
Median Age

41.6 YEARS OLD

Total Fertility Rates

1.73 BIRTHS PER WOMAN

Flag



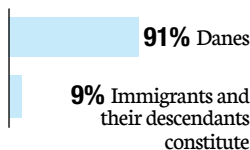
Size (sq.km)

42,430

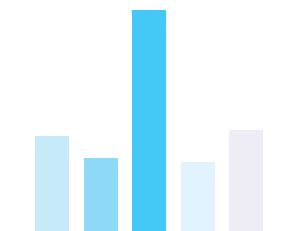
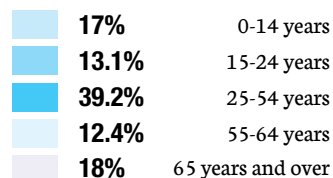
Population

5,569,077

Ethnicity



Age Structure



Retirement Age

65 YEARS OLD

RETIREMENT PROTECTION*

1st PILLAR

The State Pension

- It is based on citizenship and is therefore a universal right.
- No earmarked contributions are paid to the financing of the scheme.
- It is financed by taxes following the PAYGO logic where the generation in active employment pays the pensions of current pensioners.
- Part of the social pension is dependent on current incomes, from for instance occupational and private pensions.

2nd PILLAR

Supplementary Occupational Pension

- Formed by 2 Schemes which are The Basic Supplementary Pension and Occupationally Related Supplementary pensions:
 1. The Basic Supplementary Pension (ATP) created in 1964:
 - Benefits based on number of hours worked, not earnings.
 - It is provided when employees work at least nine hours a week.
 - The scheme was a combination of a funded scheme and a PAYGO scheme.
 - All people who have reached the age of 16 who are employed in Denmark are covered by the ATP scheme.
 2. Occupationally Related Supplementary pensions.
 - In order to enlarge private savings of those groups who did not have any supplementary pensions to the peoples pension and the ATP, occupational pension be extended.
 - The amount depends on how long the person concerned was covered by the scheme and on the amount paid in contributions.

3rd PILLAR

Personal Pension Savings

- Two kinds: so-called capital pension and rate pension. Both forms are treated by the tax authorities.
- Capital pension which gives the pensioner a one off lump sum at the beginning of retirement which is taxed 40 percent taxed when they are paid out again.
- Rate pension which gives monthly payments which will be taxed according to future prevailing tax regulation as any other income.

* Sources: http://grammatikhilfe.com/europeanInstitute/research/hellenicObservatory/pdf/pensions_conference/AbrahamsonWehner-Pensions.pdf



Chapter 10:

EVERYDAY AGEING IN COPENHAGEN

***By Nina Rose Stald-Bolow, Lone Malmborg, Eva Brandt
and Maria Foverskov***

Introduction

Senior life in Copenhagen is lived in numerous ways. Through three seniors' stories from their everyday life, we give an insight into this diversity. We look into how they imagine a good senior life can unfold in Copenhagen today. The three senior lives portrayed here were part of the everyday lives we got the opportunity of looking into and being part of during the project Senior Interaction¹. Project Senior Interaction has largely focused on understanding seniors' everyday lives. The seniors, in collaboration, have created a shared understanding of what it means to live a life as a senior in Copenhagen. Some topics are repeatedly mentioned: What does it involve to be retired? How are duty and desire balanced in senior life? Is it a dilemma having time to do whatever you want? And what do change and social relations mean in this part of our life?

This story is based on interviews. It is about Ulla and Inger Elise aged 67 and Robert 87

years. They told funny, sad and exciting stories from their lives and thus gave us an insight into their very different lives, and what gives meaning and creates balance to their lives.

“The Smell of Morning Coffee”

In the morning, when the sunbeams hit the large kitchen window, the coffee smells freshly brewed, and a well-known voice on the radio tells funny stories and jokes, Ulla feels relaxed and enjoys life. She is a fresh and energetic woman with many activities in the calendar. Her good humor and colourful t-shirt make the small room light up. The conversation with Ulla never silences.

Ulla tells that for many years she got up early every Thursday morning to go swimming and do other water sports with the local sports team. She did it for so long that it actually came to hang her far out of

the neck. "Yes, it's called shut up and get off your ass if you want to stay fit." She sighs to stress the efforts that are sometimes needed to keep going. She is really happy to swim, but when not swimming with the team, she feels guilty. Then it becomes more of a duty than a pleasure. She laughs a little, when she talks about the days when she skips the exercises. "I'm a little lazy by nature," she says modestly.

Ulla has always lived in the same neighbourhood in the South Harbour of Copenhagen. After her divorce, she bought an apartment, which she is very happy with. She talks about the light in her kitchen window and the new, large living room with space for her huge collection of books. Ulla is inspired by the city and its many possibilities with museums, cultural institutions and parks. The little things in everyday life also have a crucial importance for Ulla. They contribute to creating a good day, she says. The many activities she participates in provide meaning and structure in her life as a pensioner, which has now lasted for six years.

"It's Great to Have a Chat"

The interview with Robert takes place in Kvarterhuset, a community center for seniors in the South Harbour. Robert has provided tea and coffee for the interview. The ladies who run the place, know Robert and let him use the small kitchenette, which occupies half of the space. In the other half there are some computers, and five steps down a small flight of stairs, there are tables and chairs where seniors can sit and have a chat. It is a small, but nice place where Robert tells he spends many hours. Robert is cautious. His movements are slow and careful, as he must take care of his bad knees and back.

After making sure that we all have coffee, Robert begins to tell in an insightful way that

only someone with a long life behind him can do. He tells stories from the days he was little and played in the yard, and the mothers were working in the home and called the children home for dinner, when Dad came home. He tells of the dangerous machinery he managed at the age of 14, when he was apprenticed as a needle worker at a shoe factory to a small salary, and how, through connections and hard work ended up being a laboratory technician and made analysis at the machine factory B&W for 30 years and later at the National Road Laboratory for 15 years. He retired at the age of 69.

During the interview Robert greets all the visitors, who enter the door to Kvarterhuset. He smiles kindly and says hello to them. Meanwhile, he tells about the sailing club, which he is a member of. It is fascinating listening to Robert describing his life as a sailor. He talks about how to set sail by compass, and how to care for and fit a wooden boat and to give it time and attention. He also describes how it feels to be part of an association of people with the same interest and passion. He still visits the sailing club, where he meets several of his old friends and acquaintances.

A good day for Robert is to get out for a bike-ride in the neighbourhood, which he knows so well and have a chat with those he meets. Through his sailor life he got used to being outdoors and appreciates the fresh air. There are almost no weather conditions that keep him from getting out. He bikes both in rain and wind - even if his knees creak a little.

"I'm Doing Great"

Inger Elise breathes after stomping hard on the pedals to arrive for the interview in due time. It's cold outside, so she has warm clothes, a shawl and a sweater in reddish,



brown and yellow colours. She seems warm and welcoming and has a great laugh. She says that she loves to laugh, especially in the company of others she cares for. "It gives joy to life," she says.

Inger Elise retired at the age of 63. She has trouble remembering the exact year. "It's because I do not attach importance to such things. I am amazed that I can even remember how old I am." Inger Elise is doing great, really great, she says. She describes with thoughtfulness, what a good day looks like for her. She finds it hard, because there are many of them. A good day for Inger Elise consists of light and sun, cooking for good friends, or being allowed to indulge in her sewing. She devotes time to being outdoors every day and often takes long bikes trips. She likes to spend time with other people, but she also enjoys her own company.

Inger Elise and her husband travel a lot. This

year they have already been away four times. "To have the time to travel gives life energy and a good mood" she says. At Christmas, they fly to Gran Canaria. In the past, they went by car to France and Germany, along with their two sons. They could not fly because Inger Elise suffered from anxiety. Today, she's different. She explains that she takes things and challenges as they come. And if they come, she's the type who acts. "Something needs to happen" she says. "I'm not sitting quiet in a corner waiting for life to go on."

"Selling the Boat"

Robert lives alone in Valby. He lives in the same apartment, which he shared with his wife for many years. He is taking care of most of the housework including cooking and cleaning. Occasionally he has a cleaning maid to help him do the cleaning, but that's all. He talks about how it was to live with his wife in Valby, with



lovely park environments and his beloved sailing club not far away. When Robert talks about sailing club, he lights up. He tells that he has been a member of the sailing club for 75 years. It was his science teacher, who once got him enrolled in the club, and since then he has competed and sailed a lot. He talks about the holidays, where he and his wife sailed in Denmark and Germany in their own wooden boat. In the past years physical challenges have reduced the joy of sailing. "I've been sailing all my life, but when I lost my wife, and when I got osteoporosis, I could not take care of the boat any more. It was a wooden boat, and it had to be grinded, polished and painted, and I just could not do it anymore. So I had to sell the boat."

"I Want It All"

Ulla picks a grape from the bowl and explains that as a pensioner you have to take action to

get something out of everyday life. It can be difficult, when children or work don't require you any longer. "This is one thing about being a senior, you have to take action yourself. If I have plans or appointments, I'll get up and get dressed, and I structure my day, but if I do not have any appointments I often do not get ready before 11am." For Ulla, it is not the number of activities, but the structure in everyday life that feels important. This means that she in good conscience can enjoy the mornings, when she takes the time to relax and do what she would like.

With a hint of frustration in her voice, she explains a dilemma that she sometimes experiences when she would like to take advantage of the freedom of being retired. She wants it all; to visit museums, chat with her friends, be a nice grandmother, sing in the choir, etc. "Fitness is on Mondays, choir is Tuesday night, and then there is water gymnastics on Wednesdays, and then I also

signed up for yoga on Tuesdays. It is difficult to draw the limit." When Ulla does not manage to participate in what she signed up for, it affects her. She never showed up for yoga. There must be space and energy for it all, but also for reading the newspaper in the morning, and feel satisfied with the exercises, the activities and the experiences she has in everyday life. "There are plenty of offers, if you are proactive, but it can be difficult to hit the right balance," she says.

"I Want My Freedom"

Inger Elise sits comfortably in the chair. She has a slightly ambivalent feeling about being senior. As Ulla also mentioned, it is important that you are able to find a rhythm in your everyday life, which means that you get up, get out of bed and start the day. This rhythm has Inger Elise spent a lot of time identifying in her life as a pensioner. Otherwise, she thinks the day is escaping much too fast.

She reflects carefully as she explains how it was not until her retirement that she has obtained the tranquillity she needs. It is a life with fewer obligations and concerns about children and about where the money will come from. This means that she is more self-confident. Inger Elise has spent most of her working life as a teacher in the public schools. She has been really happy, but it has also been difficult at times. She has struggled with parents, new ways of raising children, and many obligations in terms of learning goals and preparations. She tells how tired she was after a day as a schoolteacher, and how she had to have a nap when she got home.

Later, she learned to take things as they come. This is due to the ability to choose and pick, and the possibility of deep

engagement. There is a sharp distinction between duty and desire. "If I couldn't choose and pick, I would not enjoy life. This is perhaps why I feel so good at the moment. When I worked, I had to put much away, because work and preparation took up all my everyday life, and made me so tired. My own private interests were somehow always set aside. I do not want that to happen now. Now I can do exactly what I want to."

"The Exact Age Is Less Important"

The term 'old' is not new to Robert, nor are the terms 'elderly' or 'senior'. He has had 17 years to get used to the different terms. He uses the word 'elderly' or 'ageing', when he mentions some of the changes he's been through, mentally or physically. Robert experiences many different situations in which his exact age is less important. For example, when he is swimming or goes to Valbyparken to exercise. Here the majority are a lot younger than him. In the sailing club there are many who know Robert, young and old. Robert tells about the young head of the sailing club and shows pictures of him on his Smart Phone. Robert likes to keep up to date and feels that new technologies are exciting. He says that when he is not able to run a usual bike anymore, he is considering buying an electric bike, like his good friend Susan. Bicycling is something Robert does not want to live without. Age should never prevent him from biking.

What is really troubling Robert, is the physical aspects of getting older. He says he has a lot of pain, but when we need milk for the coffee, he insists to go and get it. Despite his pain, Robert moves a lot. He believes that it is important. "It could be worse" he says and smiles.

“I Do Not Want to Belong to the ‘Old’”

Inger Elise does not want to be called a 'pensioner', not to mention the word 'older'. It sounds too old, although she admits that she will have to accept it one day. But as things are now, she does not feel that she belongs to that category. "I will not belong to the 'old ones'. Yes, it is nonsense, I know, but I really don't see myself in this category. I know that I will enter there at some point." In most situations, Inger Elise does not associate the word 'elderly' or 'senior' with her current life situation. What frightens Inger Elise is what is associated with 'nursing homes' and 'elderly burden'. It is terrible. She does not understand why we talk about 'elderly burden', since we refer to people that have contributed to a good society, and still help to shape it – just like her.

“The Close Relations Are Always Something Special”

The grandchildren play a special role in Ulla's life. They are still young, and it frequently happens that Ulla takes care of them, when their parents are busy. Ulla comes up with various activities, together with her eldest grandson who is four years. For example, she is looking for some good flyswatters and balloons, so they can play flyswatter-ball, which is an activity that she has been introduced to in the exercise community in Valbyparken. She also attends children's theater and various concerts with her grandson. Ulla enjoys it very much, and she is always looking forward to the time they spend together, but it must fit into her calendar.

"After I participated in Grandparents day last Wednesday at kindergarten, I had to hurry. There was a presentation at the

library in the evening, and I wanted to attend this event."

During Ulla's stories about her activities and about what's happening in her life, there are often different friends appearing in the stories. She tells about a wonderful trip she had with one of her friends to Louisiana art museum. "We talked continuously during our trip," she laughs. "It was 8 pm before we got home." But there are also friends that Ulla is not seeing any longer, and there are activities at which she deliberately chooses not to see the other participants in between the events. She says that it can be too much. For Ulla, it is important to nurture and care for the close relationships. It can be to choose the perfect birthday cards for her sister's grandchildren, to buy flyswatters and balloons for her friends' grandchildren in Madrid, or to send funny things and stories back and forth to her good friend, who lives in South Africa.

“Lots of Good Memories”

Robert talks about his younger brother, who is the closest family he has left. They live 500 meters apart. Robert also has a cousin in Copenhagen, but he rarely sees him. It means a lot to Robert that he and his brother still have a close relationship. But he often wonders what happens if one of them dies. "Now we are only two left in the family, my brother and I, and then I often wonder what if I die, what about him? Can he handle it? And if he dies before me, it is also bad. I am concerned about the future." Robert takes care of his younger brother, who needs extra help to cope with everyday life. This role seems important to Robert. His younger brother is part of a long life, which Robert happily reflects about. This also holds for close friends at the sailing club, but unfortunately there

are not many friends left, he says.

Robert and his wife chose not to have children since his wife was suffering from a rare, hereditary disease. He tells movingly of when he lost his wife. "It is seven years since my wife died. She was in a nursing home for three years before she died. She had muscular dystrophy, and it was a really sad thing." He tells how he visited her every day at the nursing home. Their marriage was very important to Robert. When he thinks of her, he often feels sad.

He tells about the many good experiences that fill his life. In recent years, Robert has added some new faces to his group of friends. He has got many new friends at Kvarterhuset and enjoys coming to have a chat with the various people who visit it.

We talked continuously during our trip

Robert shows more pictures on his phone. There are pictures from the Christmas trip with Kvarterhuset, there are pictures that he took of old photographs of himself and his wife, and there are pictures of his brother and the sailing club. Robert tells about the good old days, the years in the yacht club, his time as an apprentice, and his marriage.

"Three Seniors, Three Different Life Stories in Copenhagen"

Inger Elise, Ulla and Robert live three quite different lives. Robert and Ulla live alone,

and Inger Elise lives with her husband. Robert retired many years ago, and Ulla and Inger Elise only left their professional careers a few years ago. They have all expressed different needs regarding exercise, activities and social relations and their uniqueness in terms of what makes sense for them in their everyday lives as seniors. But in all three life stories close relationships and maintaining an active every day life both physically and mentally seem to play an important role. ■

Acknowledgments

Thanks to the three senior citizens Robert, Ulla and Inger Elise, who were all engaged co-designers throughout the project

References

¹Brandt, E., P. F. Mortensen, L. Malmborg, T. Binder and T. Sokoler (eds) (2012). SeniorInteraktion - Innovation gennem dialog. The Royal Danish Academy of Fine Arts, School of Design.

¹Brandt, E., Binder, T., Malmborg, L., & Sokoler, T. (2010). Communities of everyday practice and situated elderliness as an approach to co-design for senior interaction. In OZCHI 2010 Proceedings.(pp. 400-403). Brisbane, Australia.

{STATS}

AGEING IN ITALY

- Southern European country bordering France, Switzerland, Austria, and Slovenia. Italy is roughly delineated by the Alpine watershed to the north.
- Milan is the second-most populous city in Italy and the capital of Lombardy. It has been suggested that the Milan metropolitan region is part of the so-called Blue Banana, the area of Europe with the highest population and industrial density.
- Retirement protection system in place.

Life Expectancy

(at birth as of 2014)

82.03 YEARS OLD

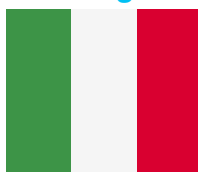
Median Age

44.5 YEARS OLD

Total Fertility Rates

1.42 BIRTHS PER WOMAN

Flag



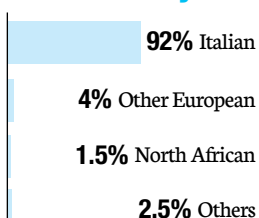
Size (sq.km)

294,140

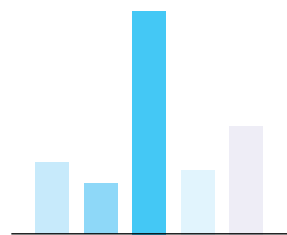
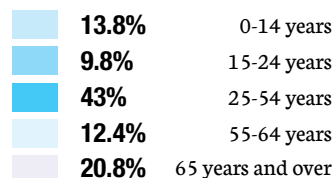
Population

61,680,122

Ethnicity



Age Structure



Retirement Age

59 YEARS OLD

RETIREMENT PROTECTION*

1st PILLAR

The State Pension

- Marked by the generosity and equity of the public pension.
- Compulsory for all citizens.
- In 1919, the first compulsory pension scheme for private employees in Italy was introduced, payroll is on a contributory basis.
- In 1995, reform changed the Italian pension system significantly by adopting a notional defined contribution approach, instead of prior career average defined benefit scheme.

2nd PILLAR

Supplementary Occupational Pension

- A fully funded scheme of systems where the contributions paid from each single employee are available to pay off their own pension scheme.
- It can be compulsory or voluntary. If it is compulsory, the company has to create an occupational pension plan for its employees (in general, all workers) and makes at least the minimum contribution required by law.
- In 2007, there is a large development of Pension Funds, especially due to the possible transfer of Termination Indemnity to Pension Funds will be destined in order to finance the Social 2nd Pillar.

3rd PILLAR

Personal Pension Savings

- Fully funded system where the contributions paid from each single employee are available to pay off their own pension.
- “Open” pension funds play a role in this pillar, when they offer a social security product to a given class of employees (for instance, the workers of a given firm).
- Third pillar is formed by personal pension plans, which are voluntary and individual, in which constitution and membership do not require any specific relationship between the sponsor and members.
- In 2000, the Italian government undertook a fiscal reform of the 3rd pillars.

* Sources: http://www.bundesbank.de/Redaktion/EN/Downloads/Publications/Discussion_Paper_1/2011/2011_05_09_dkp_09.pdf?__blob=publicationFile
[http://eprints.biblio.unitn.it/2077/1/Aben_\(2011\)_Overview_of_the_Italian_pension_system.pdf](http://eprints.biblio.unitn.it/2077/1/Aben_(2011)_Overview_of_the_Italian_pension_system.pdf) • <http://euracs.eu/summaries/italy-pension-summary/>
http://pure.au.dk/portal-ash-student/files/52294139/Thesis_ZM.pdf • <http://www.world-pensions.org/docus/uno23.doc>

Chapter 11:

LONGEVICITY

By Francesco Zurlo, Carla Sadini and Arianna Vignati

Introduction

Longevity is an interdisciplinary project. At its start it involved the Department of Design of the Politecnico di Milano and the Complex Systems & Artificial intelligence Research Center of the University of Milano-Bicocca (ITALY). The event was powered by Sarpibridge with the participation of NUST - Nanjing University of Science and Technology, and Grey Panthers <http://www.grey-panthers.it/>

The present contribution was edited by the research group of the Design Department of the Politecnico di Milano composed by Francesco Zurlo, Carla Sadini and Arianna Vignati.

How Did It Start?

Societies have started to pay attention to the implications of ageing.

We identified mainly two alternative approaches as far as design is concerned.

The first one is what we can call the “rejection approach”. From the design point

of view, it consists in the production and commercialization of a series of products that do not take ageing and its peculiarities into consideration or simply avoid the consciousness of getting old. Design in this case is completely missing a section of the booming marketplace. Beautiful objects are designed but they do not take into consideration senior users and their needs.

From the other side, we have the so-called “hospitalization approach” which is constituted by very stigmatising products and services, usually characterized by scarce attention to beauty and attractiveness. Design in this case forgets the fact that an object has, first of all, to transfer emotions and has to be meaningful.

Therefore, there is an attention to the senior users but not to the pleasantness and the meaning that an object embodies.

Attractiveness and usefulness of a product constitutes the dichotomy that defines its success. When one of the two elements is heavier than the other, an imbalance is

created. According to this, the concept of ambidexterity was introduced in design. The usual definition of ambidexterity refers to people who can equally use the right hand and left hand to operate. In design ambidexterity has to do with the balance within innovation processes exploitation and exploration activities, as we will see later. When an organization use more one of them, a lack of balance is expected.

This equilibrium depends on sectors, product, vision and context. For example, without underestimating the real physical degenerations and limitations which age brings with it, the challenge for designers is constituted by the use of approaches close to that of the design for all. Apart from current challenges, designers have to look forward and think about the world of tomorrow, in which the average age of the population will be much higher than today, the composition of the so-called “elderly group” will diversify, the population will become increasingly more able, healthy, technologically trained and active than today.

The main problem designers have been faced with is the lack of a common vocabulary, one that was functional to the project, and allowed them to explore and design pleasant and functional objects and services for seniors (Zurlo, 2014). Also for this reason a trans-disciplinary approach is suggested because several aspects not investigated yet have to be taken into consideration. This approach is close to that proposed by the User Centered Design (UCD) or Human-Centered Design (Norman and Draper, 1986; Norman 1988) and after it the Persuasive Design (Fogg, 2009) and the Motivational Design (Gianandrea, Casali, 2009).

The attractiveness and usefulness of a product constitute the dichotomy that defines its success.

This approach has its origin in ethnography and participant observation methods: the user is at the center of the observation and designers can obtain important insights derived from the identification of customer needs in order to generate innovative products. But the UCD (user centred design) approach alone is sometimes not enough to read the behaviours and actions in relation to others.

The relational needs and the ecology of relationships seem to fade into the background. The product ecology (Forlizzi, 2007) is then the innovative approach for design for seniors because the unit of analysis is not the user but the group, the community, the organization. But a new model of project management to design for seniors asks an additional step: the participatory design approach.

Designers are facilitators in a relation with users in order to negotiate with them the topics and the 'words' to use. This activity is often supported by prototypes, which facilitate the relation and the production

Designers are facilitators in relation to users: to collaboratively negotiate the topics and the 'words' to use.

of shared solutions. It is a creative process that starts negotiating the meanings of the object and it will open to the generation of new objects, beautiful and defined by a meaning and a relationship.

This might be the best process for innovation in design for seniors, where the testing phase and the discussion with final users is very important. However, it has to be said that, according to Verganti, radical innovation comes also through meaning change and, as we already stressed, design for seniors must, first of all, change its approach to its meaning and contents.

City/Country & Timeline

- The first experience under the Longevity theme was an exhibition and a series of conferences organised during Fuorisalone 2014 (Milano Design Week). It was located in Paolo Sarpi street in Milan (Italy) at the space SarpiSei, a large unused cinema, roughly 400 square-metres.

Addressing Issue(s)

The philosophical concept of “becoming” is most closely linked to the idea of Longevity. Philosophical becoming is to be thought of as endless mutation, an eternal flow of reality.

The Importance of a Long-Living Society:

Améry affirms that is the other's sight which show to people who are getting old the loss of their potentialities and which determines their marginal position within the active world (Pinna and Pott, 2011). Thomas Rentsch (1995) stresses the dignity that societies should recognise to the senior age, as well. Starting from the Kantian premise saying that a young is a potential old, society should be able to elaborate an ageing culture based on humanity where the communication possibilities among generations would be exploited (Pinna and Pott, 2011).

A Positive Counter-Position Between Young and Old People:

According to Heraclitus, “being” is subject to time and change (panta rei, everything flows). Reality is dialectic: there's no young age without the old age and vice versa. Harmony, according to Heraclitus, is in change and dialectic.

Design Shapes a New Meaning of “Elderly”:

According to Aristotle, substratum is what allows change and, for example, the passage from the young age to the old age. In this case, becoming is activated when there is this passage from the deprivation to the form, which is meaning, sense and

direction. Trying to materialize these philosophical aspects, we should think about design products for seniors. Since now, stigmatising and ugly products have characterized this kind of design. Longevity wants to propose nice and inclusive design products favouring intergenerational relationships.

Intercultural Approach:

As Simone de Beauvoir (1970) discussed, beyond physical and psychological limitations that can be observed in all the societies, specific symbolic values and social representations of the senior age emerge differently according to the belonging culture (Pinna and Pott, 2011).

Technological Chances:

We can refer to Manuel Castells work (1996): technology is society, but at the same time society gives shape to technology according to its citizens needs and desires. Looking at the future, when also the over 65 will have a wide capacity of using several technological means, probably several services will use the web to function.

In addition, the whole conceptualization of Longevity was based on three main sections of interest:

The first, which was called “Exploitation”, corresponds to products and services, focused on seniors, their problems, their needs, and their tastes. Exploitation section wanted to spread some light and investigate design products already existing on the market. The objective was to identify, in light of the exhibition organised for Fuorisalone 2014, Italian products which:

- Were designed with a senior perspective,

- Used a design-for-all approach;
- Weren’t explicitly designed for the over 60, but responded anyway to their needs.

All the selected products were – in our opinion – not stigmatising but pleasant-looking.

The second interest, was called “Exploration”. Innovation, which is nurtured by vision and research, is in this section of the exhibition; the goal is mapping, even if only synthetically, some tendencies which emerge in the field of design for seniors. Exploring means also make visible the “normality” of a condition that already characterizes (and it will in the future) the societies of very crowd countries. The Exploration section wanted to show prototypes or ideas which, describing research experiences, scenarios and visions, were able to stimulate designers and companies about these topics. We also launch an international call for ideas to collect interesting products and services proposals.

The last section, “Inspiration”, wanted to imagine the future, without be scared of it, and tell stories which would be useful for this mission of projection toward the future.

Summing up, Longevity wants to:

- Promote the idea of a long-lived life and society, able to transform itself, adapt and become meaningful.
- Define this period of life not by exclusion of what seems no longer possible, but through new chances that life gives.
- Through these transformations, giving new sense and meaning not in counter-position to the previous ones.

- Pay attention to both the individual as well as a whole society's wellbeing.
- Favour a non-stigmatising, intercultural and intergenerational discourse on longevity.
- Longevity sees in technology an ally able to answer not only to current needs, but especially to future ones.

Project Organisation

The exhibition and conferences were organised according to the three sections previously discussed: Exploitation, Exploration and Inspiration. Looking at the exhibition, the space was divided into islands, according to different areas of house and life:

Longeviliving

A healthy body and a healthy mind: it is the perfect equilibrium. It's more straightforward to find this balance in a place of leisure; where relaxation, reading and meeting friends and relatives is easy. The living room is not only a functional, but a symbolic place: it marks life's moments, it collects memories; it keeps the most important things.

Longevikitchen

The kitchen is one of the most "active" places of the house and it's also the one that in past years has changed dramatically. It is the room where socialising takes place. It's a place loved by seniors because, when accessible, it's nice to spend time in it.

Longevinight

The room for resting, dreaming and remembering, is important to be adaptable

and comfortable, not to mention safe. Longevity bedroom should promise all of that.

Longevibathroom

The bathroom is the room most often stigmatising in terms of its design, which Longevity wants to rethink. It's the most important place to take care about oneself and where design is mainly experimented.

Longevicare

It's normal that with senior age could come together some physical and health problems. The normality of these *défaillances* would have been evaluated in order to find solutions for taking care about oneself easily, simply and lightly.

Longevifun

Seniors usually have more spare time to enjoy and sometimes they don't know what to do. There are new potential scenarios for design that seem still unexplored: some tips in this section.

Longevisocial

Seniors, like everyone, have relationships of friendship and love. This is a central issue that is usually investigated by several ideas of start-up apps, products and services as those selected within this area.

Each area was composed by Exploitation and Exploration sections, with the exceptions of Longevikitchen, (Longevifun and Longevisocial), and utilised existing products and prototypes or just design ideas. In order to complete the Exploitation section, a research of products was carried out.

Initially, we included both Italian and international products. Finally, we decided to include, for practical reasons, only Italian companies or brands that would have been easily reachable also in Italy. The brands and the products included in this section were: AGS, Colombo Design, Contexta - CARE, Imaflex, Lifetoys, Missaglia, Nintendo, Philips, Rapsel, Zinco Service.

In order to collect projects and prototypes for the Exploration section we followed several strategies:

We launched an international call through DESIS network, we involved the SkillPoint Health Care Design of the Politecnico di Milano, the Nanjing University of Science and Technology (NUST), the final workshops of the Politecnico di Milano, Impact Hub - Milano, which recently launched a call about the Longer Lives topic.

What Happened?

For Longevity exhibition we collected 35 projects ideas of which about 19 prototypes. About 18 projects were from foreign design students, mainly from China. Since we cannot show here all the projects we made a selection according to the different origins of the ideas:

DESIS Network: GluK

Designers: Rosanna Veneziano, Luigi Indaco, Sara Nappa, Salvatore Natale, Federica Tartaglia

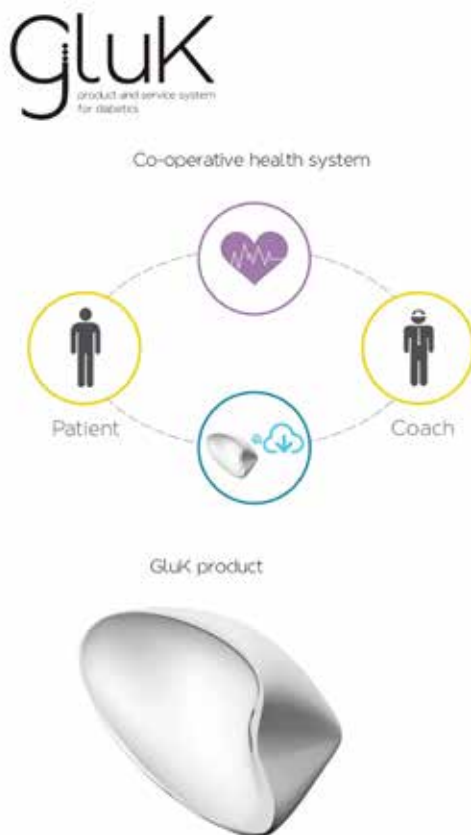
- Description: GluK is a device which helps diabetic people in the management, both practical and emotional, of the disease and directs them to healthier lifestyles aimed at preventing other diabetes-related pathologies.

- Area: Longevicare
- Why we chose it: this project is particularly interesting because it faces with a medical problem that is not specific of the senior age. In addition to that, we also appreciate its design.

SkillPoint HCD: AdaptLiving

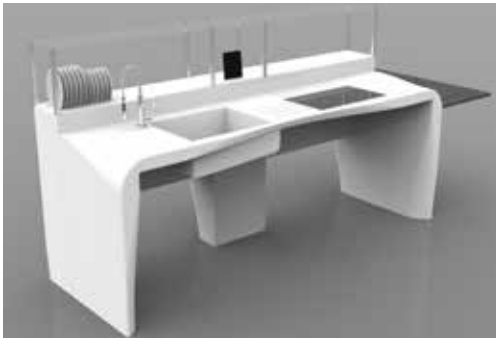
Designers: Alessandro Carpentiero and Sabrina Muschiato

- Description: the prototype of this adaptable kitchen was presented for the



first time at Longevity. The project was realized in collaboration with LG Hausys using HiMacs - Natural Acrylic Stone - and thanks to the contribution of Varenna (Kitchen Division of Poliform group). AdaptLiving is an island kitchen, designed to be easily accessible for everyone; it has been developed following a UCD approach.

- Area: Longevikitchen
- Why we chose it: the innovative project design with a full inclusive vision, convinced very important companies to develop the prototype.



NUST: Finger Dance

Designer: Xu Xun

- Description: Finger Dance is designed to help people with limited finger and hand mobility or finger injury patients that need to maximize their recovery. This product also allows users to create a melody when they move the finger. Dance Finger can work with the computers, MP3 player or smart phone.
- Area: Longevicare

- Why we chose it: we appreciated the multi-purposes of this project and the research of pleasantness also in rehabilitation exercises.



Final Workshop-Politecnico di Milano: ICIA

Designers: Andrea Lombardini and Francesco Pace

- Description: this glove contains in itself a complete kit for workmanship and garden care: it is made up of rake, shovel and wire cutters. It reduce muscle strain resulted from the traditional tools in response to their need for a healthy and productive relationship with nature.
- Area: Longevifun
- Why we chose it: we appreciated the willingness to break down the distance between user and action and the purpose of keep spare-time activities notwithstanding physical limitations



Impact Hub: V.I.S. (Very Important Senior)

Designers: Carlotta Broglia and Giulia Predari

- Description: VIS is an App for Ios and Android. The interface of the platform is an interactive agenda that collects Seniors needs divided by typologies and students availability of time to dedicate to voluntary work inside their neighbourhoods and their study plan. The principal goal is that of support seniors giving them a big responsibility as well because they would have to judge the student to let him obtaining a scholarship. Scholarships will be sponsored by enterprises that participate in the project as partners.
- Area: Longevisocial
- Why we chose it: we appreciated the intergenerational focus and the value that is given from one side to the seniors' judgment and from the other to the students' voluntary services.

Finally, we had an Inspiration section that was based on the experience offered by Ford with its ageing suit. This suit was thought by Ford in order to design cars more carefully and testing all the physical limitation that a senior can have. The visitors of Longevity could try the suit on and have the perception of all these physical limitations.

To Conclude

Looking at the future of our societies, new challenges arise from the demographic and cultural changes affecting them. Design can research to elaborate possible answers to new needs that citizens express. Often, these needs do not find an answer not just because they are “new”, but also because they are very disrupting with previous habits and knowledge. We are facing a future in which people will live longer and healthier lives, but, as the current market trends testify, we still do not have the categories to interpret the needs that the future over-sixties generation shall raise. The purpose of Longevity is that of developing observation, studies, and reflections which, thanks to inter-disciplinarity and inter-culturality, look toward a renewed attention, discussion and production oriented practice to those seniors whom still have much to do and a lot to say. ■



{STATS}

AGEING IN JAPAN

- Japan is an island nation in East Asia. Located in the Pacific Ocean, it lies to the east of the Sea of Japan, China, North Korea, South Korea and Russia, stretching from the Sea of Okhotsk in the north to the East China Sea and Taiwan in the south.
- Sendai is the capital city of Miyagi Prefecture, Japan, and the largest city in the Tōhoku region. In 2010, the city had a population of one million, and was one of Japan's 20 designated cities.
- Retirement protection is in place. Social insurance system was regulated in 1954 with a law of employee's pension insurance, and in 1959 a national pension.

Life Expectancy

(at birth as of 2014)

84.46 YEARS OLD

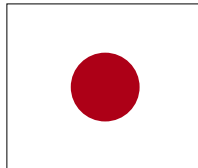
Median Age

46.1 YEARS OLD

Total Fertility Rates

1.4 BIRTHS PER WOMAN

Flag



Size (sq.km)

377,915

Population

127,103,388

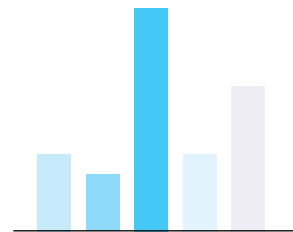
Ethnicity

98.5% Japanese

1.5% Other

Age Structure

13.2%	0-14 years
9.7%	15-24 years
38.1%	25-54 years
13.2%	55-64 years
24.8%	65 years and over



Retirement Age

61 YEARS OLD

RETIREMENT PROTECTION*

1952

- Book Reserve Plan (BRP). Traditional way of providing severance payment to departing workers, and benefits come in the form of a lump sum.

1954

- Social insurance system was regulated by a law of employee's pension insurance.

1959

- Social insurance system was regulated with the introduction of a national pension scheme.

1962

- Tax-Qualified Pension Plan (TQPP). Based on the U.S. 'Defined Benefit' model and used primarily by small and medium-sized firms with more than 15 employees.

1966

- Employees Pension Fund (EPF) used by large companies and by multi-employer groups and regulated by the Ministry of Health, Labour and Welfare.

* Sources: <http://www.pensiondevelopment.org/126/japan.htm> • <http://www.legco.gov.hk/yr04-05/english/sec/library/0405rp09e.pdf>
<http://www.ssa.gov/policy/docs/progdesc/ssptw/2010-2011/asia/japan.html> • <http://www.ssa.gov/policy/docs/ssb/v67n3/v67n3p89.html>

Chapter 12:

MISSING JAPAN PROJECT 1: 90 YEAR- OLD HEARING FOR SUSTAINABLE LIFESTYLES IN JAPAN

By Ryuzo Furukawa

Introduction

We have researched focusing on how people, unconsciously, seek “affluence” and “nature” just as strongly as “convenience” in their lives. For sustainability, what, then, is the nature of these two elements, “affluence” and “nature”? Numerous enjoyable things—games, the internet, movies—surround us in everyday life, but what people are yearning for is another form of affluence. Or, do people with “nature” mean that they are eager to go to the beach or

hiking in the mountains? We do not believe this is the only form of nature people are seeking. In order to clarify the true meaning of “nature” and “affluence” in everyday life, or in order to find the shape of sustainable lifestyles under severe environmental restrictions, we conducted a series of hearing from people around the age of 90 and made a qualitative analysis of the pre-war living in co-existence with nature. Through these hearings, we

discovered more than 70 different pieces of wisdom or techniques of living in co-existence with nature.

How Did It Start?

We developed a new methodology that we call 'lifestyle design' with a focus on behaviour, and system change for sustainable society. Currently we have two large projects running. The first one is lifestyle design project, and the second one is a 90-year-old people-hearing project about their lifestyles, and ways of living before the industrial era. Both of the projects are about the relationships between lifestyle, nature, and how to live with an affluent lifestyle for less environmental impact. As in the rest of the world we have a serious environmental problem in Japan. Some researchers try to use technologies to solve these problems, but we try to find out how we can make lifestyle changes towards a more sustainable living. We use the methodology of back casting to draw new lifestyles. That is, we start in the future and go back to present time. After that, we then find what kind of technologies we need.

We found that it is very difficult to design new lifestyles and implement them. But what we found that we can use the knowledge of old people about their lifestyles, and how they lived before the industrial systems and structures that we have today. We try to rediscover the wisdom of their environmentally more friendly way of living that is being forgotten, apply that wisdom to the creation of new manufacturing and social systems, and propose future community building. 90 year-old people have seen and experienced sustainable lifestyle living with nature. They know what could be an affluent lifestyle beyond all this, and they also know how to

access nature. Before showing more about this 90 year-old hearing project, I'd like to explain about lifestyle design project.

Lifestyle design method is based on back casting. Firstly we start by setting the environmental restriction, secondly we look into the future society and imagine our society trend in details, and thirdly we look back to the present and find the problem if we are not going to change our lifestyles. The fourth step is to find a way to overcome the disturbance, and design a new and affluent lifestyle around that. When we have defined the environmental restrictions that we want to work with, then we start discussing how the society would look like in the year 2030, the trends that are a consequence of these particular environmental restrictions. For example, if the price of the gasoline goes up then maybe the number of cars on the streets will decrease. Such kinds of effects, and trends we spend maybe half a day discussing. Usually we have people for companies who come together and try to do these kinds of lifestyle design exercises. This is just a simple method and process to create future scenarios. We have designed over 4000 different kinds of new lifestyles and found know-how to design.

We have started interviewing 90 year-old people in Miyagi prefecture, Japan. Tohoku University stands in Miyagi prefecture. There were more than 60 old people hearing. Now we have been interviewing more than 400 people from all over Japan. The reason why we have been interviewing people at different locations is because the sustainable lifestyle is depended on the nature surrounding. In the northern area there is a lot of snow in the winter, which is not the case in the South. That fact has of course an effect on their lifestyles and the way the live and organise their lives. I

have also interviewed people in Los Angeles. We also went to Berlin, Germany to do interviews.

City/Country & Timeline

- Miyagi Prefecture, located in the southeast part of the Tohoku region, is blessed with relatively mild climate in the Tohoku region. Snow cover is small because it is the Pacific Ocean side. Ou Mountains 1500-meter height is contiguous to the West. Kitakami Mountains are formed in the northeastern prefecture; Abukuma Mountains are formed in the southeastern part. Two major rivers Kitakami River and Abukuma River flow between them.
- The Sendai Plain has extended in the prefectural land center. Since the Edo period, Sendai Plain has supplied rice to the large consuming regions, especially in Edo area. It was enough to account for one third of the rice distributed in Edo. Rice field is still main in Miyagi. It is a landscape that does not change in this area.
- Between the continuous mountains and plain that gives them a fruitful harvest, hilly area of 100-200 m height called "Satoyama" has become a typical feature of the landscape of Miyagi. In the past at Satoyama, wild vegetables in spring, a mushroom in autumn, with the raw materials and resources during all seasons such as firewood, charcoal and clear water brought them an affluent lifestyles living with nature
- Along the coast area, there are many small bays such as Minamisanriku, Kesenuma, and Ishinomaki. In the south from Ishinomaki, sandy beaches draw a gentle arc and there are several beautiful scenic spots and islands in Matsushima bay. Off the coast, warm and cold currents collide, then the three major fishing ground stands and a variety of fish come and go. Kesenuma, Ishinomaki, and Shiogama have been famous fishery area in Japan. 90 year-old people hearing expanded from Miyagi to Aomori, Akita, Iwate, Yamagata, Tokyo, Saitama, Tochigi, Ishikawa, Kanagawa, Mie, Nara, Shiga, Osaka, Hiroshima, Hyogo, Kochi, Kagoshima, Okinawa island, etc.
This project has started in 2008.

Addressing Issue(s)

The hearing process is very simple. First, we looked for a coordinator in the area where we want to hear from people. The area has been selected by considering surrounding nature and culture differences. It can sometimes be difficult to identify 90 year-old people since the government doesn't give information of 90 year-old people. Instead we have to go through the coordinator's relatives and friends' relatives. Sometimes, politicians, leaders of residents' association of the local area, local business people knows where 90 year-old people live. Once we find several 90 year-old people, it is easier for us to find another in the same local area, because there are many friends of 90 year-old people who are 90 years old. A few month is needed for prepare certain amount of 90 year-old people hearing.

The most important thing to be successful is to listen slowly to what 90 year-old people say. Their memory comes up very slowly from deep experiences of long time ago. Interviewing is not good. Just listening to them is important thing. We have to be patient sometimes. After they remember how they live and how pleasant it was, we can reach to the deep relationship between detail lifestyles and affluences that we most wanted to know.

We prepare such a hearing guide for the new researchers. We have it both in Japanese and English. From my experience, it is though very difficult to follow that hearing guide since the old people prefer to choose what they want to talk about themselves. They don't really answer our questions anyway. They have already had what they wanted to talk about with young researchers. They sometimes focused on the story of War. But

we try to keep asking basic questions about the old days, everyday life, anything about their affluent lives. We ask question like: how did you prepared your food, how did you wash yourself, how did you find resources for fire, where did you get water and so on. We ask about the basics. Each hearing takes about two hours, more than that is too tiring for them.

For us, this 90 year-old hearing is for learning from old lifestyles, but there is also another effect of this activity, a health effect. There is an example of a woman that could not get up, but after the hearing she became more awake, and got more energetic. Their family will be happy after the hearing. Another reason is that there are many new findings that their family also does not know, such as old stories about grandmother's love before marriage, unknown experiences on their jobs. These new findings for their family are also an important part of this 90 year-old hearing.

90 year-old hearing method is sometimes connected to the community design and local government policy making, such as the Smart City project in Akita city since 2011, Toyooka lifestyle design project since 2013, Kitakami lifestyle design project since 2014. They are searching for new solutions for manageing energy recourses, low carbon cities, decreasing populations, etc. We suggested that we should do the 90 year-old people hearing and learn from them about sustainable lifestyles in the local area. We got a lot of ideas, knowledge and wisdom from them. Their knowledge is based on the experience of living closer to nature than we do today. We should share this knowledge, and experiences in different parts of the world.

Project Organisation

The combination of 90 year-old hearing and lifestyle design projects is appropriate to implement this project. Because 90 year-old hearing takes time and cost to implement. It is not enough for university research budget of one research laboratory to complete this project, because sustainable lifestyles in Japanese old days were known by around 90 year-old people who were born before around 1920. Since 90 year-old hearing projects have started 5 years ago, we should call this project 95 year-old hearing now. Only the people who experienced community life as an adult before the World War II became over 95 years old already. In order to speed up this project, the project organization is important. Government fund can be used for smart city projects or lifestyle design projects, but cannot be easily used only for 90 year-old hearing. And it is also difficult for the companies to fund these 90 year-old hearing projects because there is no reason why one global company fund for a certain local area's activities. Instead, the energy of social innovation still exists in Japan. After we developed HP, many local young and old people have accessed to us and tried to participate in our project. Project organisation becomes more important for this 90 year-old hearing.

What Happened? Expected Outcomes...

Between 2009 and 2011, a research group led by the authors conducted 90 year-old hearing with more than 60 people living in Miyagi Prefecture, Japan. The hearings were written down and the team spent much time thoroughly reading through these records. Through an analysis of these hearings, we extracted more than 70 different ways of living or values, including "living

in harmony with nature's rhythm" and "a community tied together by shared tasks and mutual support".

Table: Examples of pre-World War II ways of living in Japan (70 keywords)

Nature

1. The pleasure of living in balance with nature's rhythm
2. Reading the signs of nature
3. Utilising nature in daily life
4. Being prepared for natural disasters
5. Proximity to other living things
6. Playing with other living things

Community/sharing

7. Helping each other with protection of water sources, agriculture, the making of roofs
8. Community is bonded by shared tasks and mutual support
9. Places and events provide a sense of belonging for people in the community (Shrines and temples, festivals)
10. Enjoying life in the community/region
11. Annual events are important
12. Sharing the mountains, fuel and water

Bonds in the family

13. Kindness in the family
14. Mutual support beyond the family
15. Living together with people who are not relatives is common
16. Passing on Knowledge to the next generation through daily life
17. Children have a role/chores in the family
18. The elderly have a role/chores in the family
19. The head of the household has a role in the family
20. Work in the house and in the community
21. Children learn by their own
22. Children have their own world

Taking good care of things

23. Things used in everyday life are grown/nurtured and preserved with care

24. Maintenance (garden, tools, clothes)
25. No excess of things
26. Acting with half a year into the future in mind
27. Using up things, finding multiple uses, using over generations
28. Repairing and using again

Cycles

29. Food, fuel, timber etc. are procured and consumed locally
30. Circulating things (circular use)
31. Gathering things and food in the environment
32. A life of self-sufficiency

Growing and excelling

33. Snacks are grown in the garden and are part of the landscape
34. A useful garden
35. There are sheds and storage houses
36. The shape of the house reflects the way of living
37. The body is also a tool
38. You are creative and make things yourself
39. Songs as a part of life
40. There are sounds present in everyday life
41. A culture of metaphorical enjoyment

Making things

42. The house is a place of production
43. Visitors are entertained in the home
44. A working relationship with fire
45. Unique ideas to erase smells

Contact with the outside world

46. A lot of time is spent walking
47. Many different means of transportation
48. There are mechanisms and places encourage people to meet
49. Going back and forth between the city and rural villages
50. Contact with the outside world

Business and trade

51. An entertaining street of shops
52. Small scale trading

- 53.** Specialized shops and craftsmen
- 54.** Delivery businesses
- 55.** Things are sold by weight
- 56.** One person may have different trades to live by

Different values from today

- 57.** Hard working
- 58.** Changes of job, removals, changes in everyday life
- 59.** Value that is not counted in money
- 60.** A different perception of time
- 61.** You create the community yourself

After the Great East Japan Earthquake, we visited many evacuation shelters. Among these shelters, we found some to be in such a gloomy mood that we hardly dared to open the door, while others-even in a situation where people had lost everything-were filled with the smiles and laughter of the inhabitants. In shelters with a positive spirit, some people had linked pipes found among the debris together to transport water to the shelter from mountains kilometres away, some had created makeshift water basins to hold large fish that had been washed up by the tsunami, and yet others had made places to store water for drinking, cooking, or for doing the laundry. The elderly were giving instructions to the young, and the women, while chatting and joking, shared the task of cooking for the inhabitants. Even the children had a role to play in the daily life at the shelter. As we visited several times, it gradually turned spring and some of the inhabitants - who supposedly had lost all in their lives - even gave us butterbur pickled with miso as a present to take home. When we carefully observed these energetic and cheerful shelters, we learned that the

Gratitude

- 62.** Water is used with care and gratitude
- 63.** Gratitude is felt for things
- 64.** Respect is shown for nature
- 65.** Respect is shown for ancestors

Enjoyment

- 66.** A different notion of luxury
- 67.** A sense of laxness and generosity
- 68.** Moderation-knowing just how much is enough
- 69.** A clear distinction between the extraordinary/ celebratory(hare)and the daily (ke)
- 70.** Familiarity with both life and death

70 keywords of living extracted from our hearings with 90 year-old people were very much alive even today. And, we now feel quite confident that these keywords are elements of culture and life that we, at least in Japan, must not allow ourselves to lose.

Many of the values expressed in these keywords are, however, gradually disappearing in modern society, especially in the urban area. We believe that many people today feel a degree of nostalgia for these values.

Lifestyles in Akita prefecture, Japan

Here is one example of 90 year-old hearing in Akita prefecture.

She was born in 1921, Akita city. Her father was Buddhist Monk, she was well-trained and taught for all kinds of manners, cooking, sewing and helped various kinds of Temple's seasonal event and ceremonies from her childhood age. She was grown up in 7 family members, parents, Gran-ma, 2 sisters, and a young brother. They lived in

wooden flat house, where located a little far from Temple. It had large rooms and long corridors where sometimes, the monk had taken place preach and ceremony when they had funerals or seasonal events. Four separate rooms housed family members. The largest room was called "Guest Room", mainly had used temple event or for inviting guests. During war time (WWII), sometimes high-class officer and his troops had stayed the room for recruiting new soldiers. There were many events all through the year; she still recalled that mother and elder sister was so busy all the time for its preparation and accommodation.

At DOMA (Soil Ground space inside the house), there were kitchen and refrigerator. And the vase with full of water always settled there. When they had large number of guest such as seasonal event, they had have to serve variety of foods and dishes, to keep cold for fresh meals, they used the ices which is able to buy from so called 'YUKI-YA' (snow house: the Seller of the snow and ices, they kept it the deep digging hall during winter and selling in the summer time).

There were two rice cookers. One was for rice the other one for hot water. The fuel was the firewood, which also used for heater. (The stove)

The daily water was carried from common well, that role was for sister and brother's duty. It was so hard task for small kid, she remember it well. So they knew the water is precious thing and used it very carefully. So that even the water after washing the rice, they used it for cleaning. They did so much pay attention to using the water.

The toilet was a vault toilet, with #1, #2 separated. The flushed water was drained out together with kitchen waters to outside

manure pool. Once the pool was full, the famer who lived in nearby collected them for his crops.

They did have bath, so went to Sen-Toh (Public Bath). They had large garden platted many kinds of trees and flowers, the garden care had done by father who likes flowers.

There were a lot of other temples around them. The people traffic was busy and many guest were coming, but there were not so major buildings or famous place around them, only few sewing school was open. They mainly wore a Kimono or western style wear, 50/50. The kids mostly wore patchwork-kimonos that were very simple, made from cotton.

During cold wintertime, they mainly used layered wear, the men used coat, women used blanket, and kids wore thick cotton happi-coat. During her childhood, always enjoyed dinner, because there was no so called small sweets or snacks, only dried persimmons available. They were not allowed likes and dislikes, they ate anything that mother had cooked. They liked hot pod dish which called "KAYAKI", fish, vegetables and meat all put together in hot water.

Ability to Discover Enjoyment in Everyday Life

We must not forget that as the global environment degrades, the quality of enjoyment in modern society is also deterioration. Our hearings with 90 year-old people made it clear that people in modern society are gradually losing their ability to find enjoyment in everyday life. The way in which most of the 90 year old people looked positively at life is fascinating. It is no exaggeration to say that people in their nineties are ingenious

We must not forget that as the global environment degrades, the quality of enjoyment in modern society also deteriorates.

at discovering enjoyment. They have the power to find enjoyment in nature, things of everyday life, time, and even hardship, or they have the power to find easily in the environmental restriction. Enjoyment comes from hardship. Living in and with nature was mentally tough. To live wholesome, fulfilling lives under such harsh conditions, it appears that people mastered the ability to find enjoyment in even the smallest things in life. People in modern society, however, rarely find enjoyment in the chores and tasks of everyday living and are getting used to having fun and joy ready-made and provided. Television, computer games, travels, education etc., are prime examples of this trend. New games are released one after another, and people merely have to play one of these to have fun. As a result of this, it is not the case that our ability to discover enjoyment in everyday life is weakening.

Let us take a closer look at the ways in

which people in pre-war society found enjoyment in life. In the hearings with 90 year-old people, we find statements such as: "In summer, we went barefoot to the fields or rice paddies. Stones were all over the place and in the rice paddies; there was a kind of straw that hurt when you stepped on it. They said "ooh and ouch", but they walked about without really being bothered too much by this. The back of their feet was energized by walking on dirt". The back of their feet hurt from walking barefoot in the rice paddy... it remains unclear whether the stones and straw stimulated certain acupuncture points under their feet, but the person interviewed expressed a positive way of thinking in saying that it hurt because their feet received energy from nature. We found an amazing ability to change a painful experience into enjoyment with positive thinking. After many 90 year-old hearings, we found many examples of this kind of skills.

People in pre-war society also had fun matching their wits against each other: "As kids we enjoyed hiding astringent persimmons in rolls of rice straw piled high and then ate them around the time they turned sweet. It was even more fun when you found and ate some that other kids had hidden. Sometimes, though, it was your own persimmons that were pilfered". The children enjoyed matching their wits against animals, too: "I think we had more interesting ways of playing than now, when people just watch TV. Our counterparts were animals and living things, and you had to trick them into getting caught. This meant we had to work our brains hard to succeed... I think you can say this was a true experience for us".

The excitement of observing things taking place in the community is another form of enjoyment we find in the interviews with 90

year-old people: "Watching the kamaboko (boiled fish paste) being fried was also lots of fun". "There were craftsmen who were like repair smiths. They would go from house to house and fix pots that have become holey. As kids we used to enjoy watching how they brought their tools, heated metal with charcoal and poured it into moulds, and then used this to stop up the holes". "Walking home we would sing songs, and in winter we had great fun swinging our hand towels in the air until they froze and got stiff". In such ways, the children would enjoy watching the craftsmen at work in the shopping street or the different phenomena found in the surrounding landscape. Recently, there are many black boxes. We cannot see the craftsmen at work. There was a greater abundance of nature than today for the children to watch and enjoy: "In the old days, every house had a small garden and persimmons and plums would ripen on trees there. Some gardens were covered with greenery almost like parks, and we had fun watching them. So, we really loved going for a walk". "There were so many small killifish in the rice paddies and we would scoop them up with our hand towels. It was great fun". Instead, we cannot see these enjoyments in everyday life. We are leaving and not seeing to nature.

Furthermore, people in pre-war society enjoyed the gap between the daily routine and special occasions or treats. They enjoyed having sweets that were only eaten every now and then, the occasional luxury food, or clothes that were only worn on special days. The joy in this was amplified exactly because it was not food eaten or clothes worn every day. "In the equinoctial week, we enjoyed having sweet ohagi rice balls made for us and always dashed home from school". "We brought lunch boxes with us to elementary school. The side dishes (to go with the rice)

were usually just salted umeboshi plums or some pickled vegetables, but every now and then there was fried egg in the box-this really excited us". "For the annual sports meeting only, the school prepared white skirts that we would wear while competing in the different events. It was the first time I wore a skirt so it was really enjoyable". Many old people say that now everyday is Shogatsu (new year's day) and this is not fun. The preciousness cannot be amplified nowadays.

The people back then also had fun making a play spot out of any place at any time. "In the old days, we often heard children reading books aloud in the houses here and there in the village. And, on their way home from school, the children would sing verses they had learned at school in loud voices while walking. The roads, you see, were places for us to play". "It was about four kilometres to our school and we would all walk together for about one hour. We would say things like "if you lie, your tongue will be torn out" to our friends, and when we grew older would teach the same to younger kids. We had quite a lot of fun on our way to and from school". "There were different Buddhist lectures-one was a Kannon (Goddess of Mercy) lecture held by a woman, another was by a person from the Bodhisattva sect, and others were like singing sermons (called baikakou). We also sometimes went traveling and enjoyed that". So education system has changed. The people in the neighbourhood educate kids in the everyday life. Older kids also educate younger kids during walking to school. We have lost big education system by using school bus, train, and cars for going to school. We also have lost community education system because we are not sure who our neighbours are anymore.

Furthermore, the people of that time knew

ways of sharing the joys of life. “Our father always told us to share your happiness with other people”. In this way, wonderful pieces of wisdom were passed on.

Many people said, “we always looked forward to the festivals”, and these were indeed events that incorporated many such elements of enjoyment. The words of one interviewee remain vivid in our memory and describe how these old people are supremely confident of their ability to discover enjoyment in all aspects of life: “When I was a child, I did just what I wanted to, but also now I am enjoying every day I live. The world is such a fascinating place. I intend to live until I am a hundred years old”.

People who lived in pre-war Japan were, indeed, ingenious at finding enjoyment even when facing constraints.



- Changing hardship to enjoyment through positive thinking
- Having fun matching your wits against others
- Enjoying observation
- Enjoying the gaps present in life and creating gaps to enjoy

We are leaving and not looking at nature

- Creating places to play out of everyday scenes, everywhere and anytime
- Sharing enjoyment with others

Lessons of Community Design Learned from 90 Year-Old Peoples' Hearing

As part of the Akita Smart City Project, they used 90 year-old hearing methods to make visions and new technological innovation. They visited 25 old people and asked about pre-war ways of living in order to learn clever ideas and techniques for conserving energy and resources from that era. The next step is to apply these ideas and techniques in future city planning in Akita City. We created a visual image ‘a city continuing to co-exist with nature’. These items in the picture are based on 90 year-old hearing and other documents, pictures which Akita city stored and made a new visions or lifestyles for their future Akita. The point is that such a discussion needs to be not only about introducing new technologies, but must focus on the shape of future lifestyles in the city. Furthermore, participants also noticed the way this exercise made it possible to extract important elements relating to ‘Akita-likeness’. By using a methodology such as 90 year-old hearing, who have spent a lifetime in the city, it becomes possible to avoid the concern that smart city approaches might look the same for any city.



Based on the hearing of 90 year-old people in Tohoku area, we learned that in pre-war communities, people would share and co-manage resources needed for living, such as fuel, water, mountains, renewable energy and resources. People back then were not sharing everything, but they did share the truly important things in the community. Since people realized that energy and resources were limited, the community had set up rules for the utilisation thereof to avoid overuse. These were rules to maintain an abundant natural environment. This was an important element of life common to regions across Japan. Then we establish fashionable spots in public spaced called “Parklet” for sharing renewable energy, thus also creating a space for people to gather and recreate while reviving the sense of community gradually being lost in modern society, learning from

old systems under community.

The Parklet spots for sharing renewable energy are designed around these concepts that form the backbone of community and function as venues through which new lifestyles outlined with the lifestyle design methodology can be enacted. Parklets will be set up on the road, near the coffee shops, where people have to go in some other reasons, in a town and provide a fashionable space for communication and recreation. It is a simple arbour with a table and chairs. The arbours all have different designs, and thus each has its own unique style. Local materials are used for at least part of the construction. Through the Parklet, people in the community can share energy. Parklet are equipped with recharging devices running on renewable energy, and while relaxing,



people can recharge their mobile devices or personal computers. In the future, a new service, the donation of energy, etc., will also become a standard function at the Parklet, we imagine. If energy is in surplus it will be possible to donate this, and not money, to a local hospital or other public places in need of energy. With this function, it is possible to make contributions to society through the Parklet set up all over Japan. In Akita prefecture, in the campus of Tohoku University, first Paklet will be build and start the effectiveness of energy share in the community through Paklet.

These lifestyle design projects and 90 year-old hearing projects have launched and several new sustainable lifestyles with some products and services will be made soon with companies, consortiums, local governments, and central government. ■



{STATS}

AGEING IN KOREA

- Korea is an East Asian territory that is divided into two distinct sovereign states, North Korea (the Democratic People's Republic of Korea, or DPRK) and South Korea (the Republic of Korea, or ROK).
- Ulsan is officially the Ulsan Metropolitan City, is South Korea's seventh largest metropolis with a population of over 1.1 million.
- Retirement protection development in South Korea.

Life Expectancy

(at birth as of 2014)

79.8 YEARS OLD

Median Age

40.2 YEARS OLD

Total Fertility Rates

1.25 BIRTHS PER WOMAN

Flag



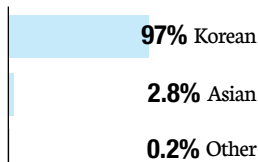
Size (sq.km)

99,720

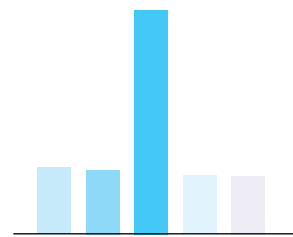
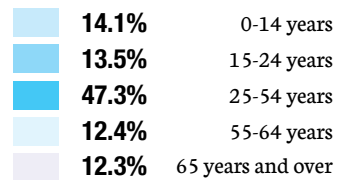
Population

49,039,986

Ethnicity



Age Structure



Retirement Age

60 YEARS OLD

RETIREMENT PROTECTION*

1960

- The Government Employees Pension System (GEPS) was implemented, as a personnel vehicle to recruit, retain, motivate and ensure a competitive and vigorous working force. Employer-sponsored retirement plans supplement the pay-as-you-go National Pension Scheme and was introduced in 1961.

1982

- The Government Employees Pension System (GEPS) was established for both the dramatic increase in the number of Government Employees (GEs) and the expansion of its pension fund. The GEPS system is financed by contributions from employees and the government, whenever pension deficit occurs, it is to be subsidized by the government's general budget.

2005

- Under the Employee Benefit Retirement Security Act, employers are encouraged to adopt a tax-advantaged defined benefit plan or defined contribution plan, or convert their existing mandatory severance plan (with the consent of employees) to one of these pension plan designs.

2010

- Small employers will pay 50 percent of the contribution rate required of larger employers.

2013

- Small employers contribution reaches 100% of same contribution rate.

2014

- The new basic old-age pension is introduced, a means-tested program to help provide a stable income to the old aged and reduce poverty among the elderly (aged 65 or older).
- The poor elderly with low or no income continue to receive full benefits under the new program, 200,000 won (US\$197) a month.

* Sources: http://www.ssa.gov/policy/docs/progdesc/intl_update/2014-09/index.html#southkorea
http://www.icpublicpolicy.org/IMG/pdf/panel_64_sl_yu-ying_kuo.pdf • http://www.geps.or.kr/g_subsite/english/vision_1.jsp
<http://www.pensiondevelopment.org/423/south-korea.htm>

Chapter 13

SENIOR CLUB IN THE DISTRICT OF JUNG-GU, ULSAN

By Sojung Kim, Yoonhee Park, and Joon Sang Baek

In this case study, we investigated a Community Senior Club in the district of Jung-Gu in Ulsan. Ulsan is the center of automobile, chemical and shipping industries in South Korea. It is also where the authors reside. Located at the southeastern tip of the Korea peninsular, it is one of the five major cities in South Korea, largest in size, smallest in population. Its size is 1060 km² and the population is 1.18 million, which is mainly composed of Korean (98.1%), followed by Chinese (0.74%), Vietnamese (0.25%), and others (0.9%). The description of the Senior Club and its activities are provided below.

How Did It Start?

Community Senior Club is a civilian organization established by the Korea Labor Force Development Institute for the Aged, which is an affiliated institute of Ministry of Health and Welfare.

Increasing number of senior people in Korea are left alone as young people tend to move out of their parents' house after they get married. Therefore, aged parents need to be more independent to make a living and maintain the quality of life. However, finding a job after retirement is not easy as they feel burdened about workload and are not welcomed by employers.



Social service programs (Source: Korea Association of Community Senior Club)

The Senior Club was established in 2004. It supports the senior people in Ulsan to participate in social activities by providing occupational training and creating job opportunities.

There are two types of job programs available for senior people in the club: social service and market-oriented service. In the former, senior citizens participate in the social and public activities such as public facility management, traffic guide in the child safety zone and caring the elderly who live alone (figure x). They offer services that create societal values but not necessarily profits, and in return, get paid by the senior club. The salary is approximately 300 USD per month. Because the program runs solely on the government budget, the number

of available positions depends on the budget amount, which changes on a yearly basis, and are also limited. The contract is renewed every nine months.

On the contrary, the market-oriented service program, as the name implies, aims at offering marketable services by utilising the knowledge, skills, and competences of the elderly people. Under the program, a dozen of business models are operating in the form of for-profit organization. They are operated by elderly people with a support from the center, and the profits are invested back to the business. Compared to the social service program, the market-oriented program is economically more sustainable because it creates more jobs, offers its workers with



Market-oriented service programs (Source: Korea Association of Community Senior Club)

a more stable working condition once the business is on the track, and enhances the feeling of attachment and self-esteem. For the senior club, creating and supporting as many marketable business models as possible is of the highest priority. The social service program can play the role of incubating and fostering the market-oriented services: if a social service develops into a robust and autonomous business model, it is relocated to the market oriented service.

Current Situation

As of 2014 around 300 seniors are working for social services such as nursery school teachers, public facility managers, senior helpers and school guards. 130 elderly seniors are working for market-oriented

services such as housekeeping, parcel delivery, restaurant, lunch box delivery, and selling handmade soaps.

In addition to supporting the ongoing businesses, the senior club is responsible for launching new business models that can be operated by the elderly. The staffs, who are mostly social workers, brainstorm business ideas by taking into account of both the market demand and the ingenuity of the elderly. They confess that, given their background, creating new businesses that balance feasibility and profitability is a daunting task and collaboration with experts in business and management is much needed.

Another challenge that they face is to develop products and services that respond to market

demand. For instance, they once launched a business with a group of senior farmers to grow and sell napa cabbages to a Kimchi factory. (Kimchi is a Korean traditional food made of fermented cabbage.) By the time they harvested cabbages, they discovered that the size and price of the cabbages did not meet the requirements of the customer, and thus could not be sold.

The third challenge is to enhance the independence and autonomy of the ongoing business models. The seniors are heavily dependent on the senior club in establishing and operating their businesses. For instance, administrative works, design, marking and heavy labors are mostly done by the staffs. This is problematic in two aspects: first, the staffs are constantly overloaded with works; and second, the seniors lose motivation because they feel that they are not the business owners but employees.

Engagement with Researchers

The challenges that the club currently face are the issues related to business modeling, management, organizational design, and product and service development. The club does not have the resources to resolve them, and needs to find opportunities for innovation from outside. Until now, they have not had collaboration with external research institutes or researchers. The head of the club admits that its business models lack competitiveness and struggle to survive and that collaboration with external researchers can be helpful. We believe that researchers can make contributions in several aspects: first, in redefining the relationship between the center and the elderly; in developing competitive and sustainable business models which have high entry barrier and are differentiated

from competitors; and in managing the resources more efficiently. Designers and design researchers can contribute to establishing and selecting differentiated business models which can fulfill the user needs so have high marketability.

Who Are the People?

While the official retirement age is sixty in Korea, many people are forced to retire in an earlier age due to an oversupplied labor market. Because the public pension system does not guarantee protection after retirement, and the income level of the retirees is significantly lower than other OECD countries (OECD, 2009) and the retirees are pushed to find other measures to maintain the quality of life after retirement. Some people choose to find a new job after retirement and knock on the door of the senior club.

The club is open to anyone in the district who is willing to work. The only precondition is the applicants' health. In addition to the initial examination, the workers are required to have a health medical examination every year. They are assigned to the appropriate business unit according to their experience and knowledge.

Most seniors seemed to enjoy working with the Senior club and the economic reward that follows. While some people would like to continue working there as long as they can, others are interested in fostering the ability of starting their own business.

What Are They Doing?

There are a dozen of businesses run by the senior club including a delivery service of the ritual foods for ancestral rites, lunch boxes for the children of low-income families,

up-cycling products with waste materials. In this section, we introduce three cases.

1) Lunch Box for Hope

Lunch Box for Hope is a company providing lunch box delivery. Thirteen elderly people are working in rotation. The lunch boxes are mainly for the children of low-income families, but sometimes they also take order from companies in the neighbourhood.

2) Grannys' Noodle



Grannys' Noodle is a noodle restaurant where eight grannies work together. Because the noodles are made in a traditional way, there are many customers who come regularly. They say the noodles remind them of the taste of their mother's dishes.



3) The Spirit

The Spirit makes and delivers Korean traditional foods for ancestral ceremonies. Four elderly people cook with all their hearts using quality and healthful ingredients. Its business model is solid, running for more than a decade, and has positive customer responses in terms of the quality of the food and service.



Individual Ageing Stories

We collected the stories of four seniors who are working for the market-oriented services. "I'd like to continue this job as long as I can." The first interviewee, Ms. Bong-lae Kim is a veteran chef and has been making lunch boxes for children for a decade. The second and third interviewees, Ms. Yun-lae Kim and Ok-sun Kim are running a noodle restaurant together. The fourth interviewee, Ms. Sang-dae Chae makes and delivers the traditional ritual foods utilising her experience in performing the ancestral rites.

Bong-lae Kim (77)

She has worked at the Lunch Box for Hope for ten years. Preparing lunch boxes for children is demanding but at the same time very rewarding. She thinks the reason she is keeping fit is because she is still working at her age. She also met new friends here. The bond between her and her colleagues is a valuable asset makes her happy and self-confident. She says,

2) Yun-lae Kim(69), Ok-sun Kim(67)



Ms. Bong-lae Kim from the Lunch Box for Hope

Their attitude towards ‘work’ has changed since they started working at the Grannys’ Noodle. In the beginning, they were hesitant to work because they felt ashamed of working again after retirement. However, they are now proud of what they do and being economically independent from their children. They say, their life became more fruitful through social engagement. This work has given them an opportunity to meet people and make new friends. They are also satisfied with the length and flexibility of working hours: They work nine-to-seven, two days a week, which gives them enough time to rest, and not physically demanding.



Ms. Yun-lae Kim and Ok-sun Kim from the Granny’s Noodle

3) Sang-dae Chae (70)

She used to be a full-time housewife with no work experience before. She decided to work at the Spirit when her husband retired and began staying at home with her all day. Her life-long experience in performing ancestral rites in her family helped her to get used to this job easily. She has been working in the club for three years now and she is content with the job. She is proud of earning money for herself and doing what she likes to do such as playing the table tennis. "I don't have any career records, but my long experience in performing the ancestral rites makes me confident in preparing ritual foods." ■



Ms. Sang-dae Chae from the Spirit

AGEING IN THE NETHERLANDS

- A small, densely populated country, lying mainly in Western Europe, but also including three islands in the Caribbean.
- Eindhoven is a municipality and a city located in the province of North Brabant in the south of the Netherlands, and is the fifth-largest city of the Netherlands and the largest of North Brabant. It was named world's most intelligent community by Intelligent Community Forum.
- Retirement protection.

Life Expectancy

(at birth as of 2014)

81.12 YEARS OLD

Median Age

42.1 YEARS OLD

Total Fertility Rates

1.78 BIRTHS PER WOMAN

Flag



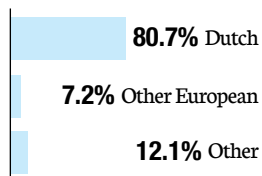
Size (sq.km)

41,543

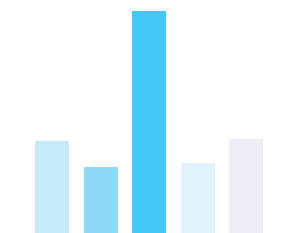
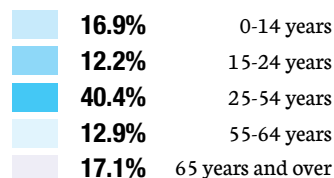
Population

16,877,351

Ethnicity



Age Structure



Retirement Age

65.2 YEARS OLD

RETIREMENT PROTECTION*

1st PILLAR

The State Pension

- General Old Age Pensions (AOW).
- In force since 1957 and is the foundation for old-age pension benefits.
- The government ensures that a lifelong basic income (not means tested) is provided to persons aged 65 and over, which provides a basic income, the level of which is linked to the statutory minimum wage.
- From 2013, the age of retirement will gradually be raised to 66 in 2018 and 67 in 2021, and will subsequently be linked to rises in life expectancy.

2nd PILLAR

Supplementary Occupational Pension

- Supplementary pensions.
- Consist of the collective pension schemes that are administered by a pension fund or by an insurance company and there are three different types of pension funds (non-profit organizations):
 - 1) Industry-wide pension funds (for a whole sector, such as the civil service, construction industry, hotel and catering industry or the retail sector).
 - 2) Corporate pension funds (for a single company or a corporation).
 - 3) Pension funds for independent professionals such as medical specialists and dentists.

3rd PILLAR

Personal Pension Savings

- Pensions are private pension provisions in addition to AOW's and supplementary pension benefits and are benefits provided by an insurance company or bank.
- Mainly used by the self-employed and employees in sectors without a collective pension scheme.

* Sources: http://www.pensioenfederatie.nl/Document/Publicaties/English%20publications/Nederlandse_pensioensysteem_Engelstalige_versie.pdf

Chapter 14

MOVING STORIES: TELLING THE MOBILITY STORIES OF OLDER PEOPLE FOR SOCIAL INNOVATION WITH EINDHOVEN'S RESIDENTS

By Heather Daam

Design can play a role in offering new and creative ways to support non-designers contribute in a relevant way to a design process by contributing their own expertise in a creative way. Bringing an empathic approach into co-design means that designers and those involved in the process can explore the world of another person together, uncovering new kinds of meaning. Our project entitled “Moving Stories” seeks to bring the stories of elderly people into the process of addressing the challenges of our ageing society in a new way, by listening to their voices.

Within a National Dutch Research Programme CRISP (Creative Industry Scientific Programme), Design Academy Eindhoven cooperates with 3 Technical Universities, 2 Universities of Amsterdam and over 50 industrial companies. The Strategic Creativity Lab in the Design Academy Eindhoven seeks to explore how design and creativity can play a strategic role in society and the economy in general, and in service innovation in particular, and as part of one of the eight projects within CRISP programme is Grey but Mobile, and specifically focuses on improving care-related mobility services for the elderly supporting independent living and social connectivity. Heather Daam together with Maartje van Gestel are two research associates contributing to this with their project “Moving Stories”. They have worked in close collaboration with ZuidZorg, an elderly care organisation and Grey but Mobile project partner. As a team of 2 researchers they joined Grey but Mobile in order to bring in the perspective of older people into the project, and to work together with a care organisation to create new innovative product service systems.

As a core aim, we were looking at new strategies for the knowledge we uncover to be used in creating new value for the older people

we are serving. We did this by getting to know older people, hearing their stories, and then giving these stories shape in order to share them later on in the process. The stories we would hear and capture first hand, and our experience with applying them would be the basis for creating new approaches.



(PART 1) MOBILITY STORIES

We met with our participants over numerous visits to build a trusting relationship and support them opening up with their stories. We worked with many different methods in order to create an understanding of their mobility, this included;

- Interviews and conversations
- Observations
- Photographing
- Shadowing on a typical journey
- Generative research sessions
- Co-reflecting on photo and video material



STORIES OF MOBILITY

Older people in Eindhoven, like everywhere have very diverse living situations and different kinds of support networks that surround them. Among many other interesting points, the stories we heard showcase the relevance of the products and services that are offered to older people really are, and more importantly how well informed people are of these affects their mobility.

**The stories
are created in
different forms:
experiential,
cognitive, visual,
and physical.**

Willy and Piet; The Biking Couple

Willy and Piet are very active and make an effort to bike everywhere they go. They do have a car, but choose their bikes for getting from A to B, and for vacations and leisure. When it's not practical or possible to take their bikes, they use public transportation. Willy and Piet work really hard to understand all the transportation systems, the services and generally how it all works. They still use paper bus booklets to look up the times and occasionally the website, but this is a hassle for them. This determination to understand the system and make it work for them.

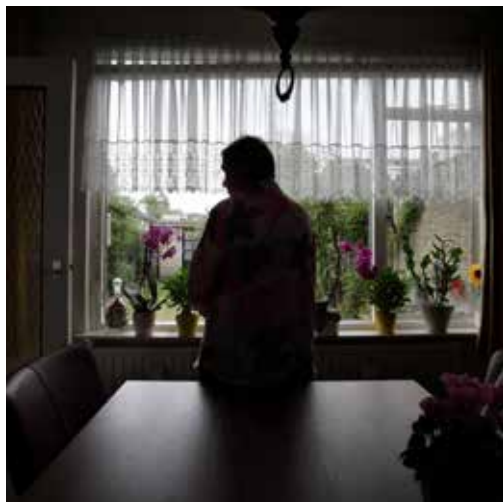


Carla: Lonely Philips Widow

Not having a big family and being very dependant on your life partner can lead to loneliness and being separated from society when your partner passes away. Carla lives alone with weekly support visits from a care organisation to help with cleaning in her home and her own washing. Despite this connection she was unaware of social programmes being offered in her surroundings that she would enjoy participating in and connecting with other older people. She has a lot of mobility aids; a chair that brings her up stairs, wheelchair, canes, wheeled walker and an electric wheelchair. Depending on the activity she chooses one of these. Luckily she has an extra shed to store all these aids, in house it would be very cramped to keep them inside, when she does have them in the front entrance, it restricts her in house mobility.

When Carla is travelling somewhere outside, she makes a lot of compromises due to

mobility. For example she won't go north of her house because she would then have to cross a busy street, and the bumps in the tiled pavement give her pain in her joints when she drives over it so she chooses different routes. This can also restrict her to choose certain aids for particular distances.



Jan: Blind and Independent

Jan is one of the friendliest and warmest people who had the unfortunate 'luck' (as he calls it) to have a rare stroke in both his eyes, this means he has lost almost all of his sight ability. On a weekly basis he gets help to go and get his groceries. Mobility doesn't seem to be the issue that much anymore, he found solutions for his challenges by now, but choosing and grabbing the right articles off the shelves has to be done by someone else.

Despite being incredibly ingenious in navigating his daily life, Jan only seems to have trouble with people on the street who don't want to take into account he is blind. Like a man who is cleaning his car on the pavement and is not understanding why he

bumps into his car. Or a woman walking her dog not minding the leash to get in his way. Or a woman backing up her car and breaking his blind stick and don't care about this. It's not the action that bothers him but more the lack of understanding of the people in his surroundings that make him agitated.



Betty: Committee Busy-Body

Betty is a warm and happy lady who is very pro active in keeping herself mobile and independent. She does this by organising sheer own systems around her that will get her to places or will keep her fit. Like going for a weekly walk with her friends, and a fixed time in the week that the taxi service brings her to the supermarket. She has a positive attitude towards how to deal with ageing. She wants to solve the practical challenges and is very aware that asking for help has to be done in a polite way in order to make sure people are understanding and helpful. She even recognises the communication gap

between generations and she doesn't expect the younger generation to understand her, she tries to adapt to them if she wants help.



thinks a lot of other people drive dangerously with their electric wheelchair and makes an effort to be more careful.



Renee: Confidant Gamer

Renee is an independent and confident lady who is less outward about her age, she doesn't label herself as older and doesn't let it change much in her life. Because of the bad reputation the elderly taxi services have—for example being too late, or drive you around for hours making numerous other stops, she doesn't use these services. When she needs to go to the hospital, she calls a regular taxi and pays the extra money. The rest she does with her electric wheelchair or chooses not to go out, restricting herself in where she goes. Despite the fact she has serious back problems since the age of 19, she is still ashamed to use aids like her electric wheelchair, cane or wheeled walker. She calls her electric wheelchair her 'Red Ferrari' in order to make light of the situation. She also

(PART 2) DESIGNERS RESPONSE

Storytelling is a methodology frequently used in Design Research in order to bring forward the user's point of view and create a better understanding of the people we are designing for. We asked ourselves how can we, as designers create a better empathic understanding for older people with non-designers in order to improve the services offered? We creating stories about elderly people's mobility from the narratives we hear during our qualitative research. The purpose for these stories is to stimulate new solutions relevant to the people we are serving through design.

With this research, we are creating a collection of stories about older people alongside methodologies to apply those

stories in a co-design process. This should be a dynamic and growing open collection which different organisations and individuals can use for creating new understandings and ideas in the area of older people and mobility. The stories are created in different forms: experiential, cognitive, visual, and physical. Simultaneously as we design and shape the narratives into stories, we are researching settings and methods these stories can add value; whether inside care organisations, mobility companies, municipalities, neighbourhoods, educational context, etc. We see these stories playing a role in highlighting the ways that older people are navigating their surroundings and empowering those who are serving them to design new innovative ideas.

STORYTELLING AND CO-DESIGN

The Empathic Adventure is an immersive experience designed for professionals and semi-professionals to contribute with their own expertise to the innovation process, particularly in the area of ageing and care. The participant is in the shoes of an elderly person by dressing up in a simple ageing suit, listening to an audio narrative, and tracing the steps of a typical journey that person takes. These three elements; physical, audio and a journey is always followed up by an



opportunity to translate that experience into the design process for example by defining opportunities or new idea generation.

For example you might meet Betty. To do this you gear up in restraints that re-enact her physical challenges – uneven soles strapped to your shoes that make every step a little more uncertain, and a shoulder strap that pulls you down affecting your capacity to reach and to look up, glasses that make it difficult to see small details. All of these factors make you easily notice the different influences and ways that Betty must navigate in our world. While you embark on a journey to the grocery store – which is your task for Betty’s adventure as it is something she does every week –you listen through headphones to her telling you about her own journey to the store and to thoughts about her mobility. This physical and audio experience allows you to relate to her story, transporting you into her world. It’s not that you are acting like Betty, but you see, and understand, and feel your journey from this different perspective.

(PART 3) CASE STUDY: AN EMPATHIC ADVENTURE

Empowering care professionals, in this case home care nurses, managers and leaders of the organisation, to contribute to the design of new innovative ideas is about facilitating them to uncover and activate the potentialities of their knowledge. Therefore we divided the process into two main phases;

The first was working with home care nurses to collectively identify design problems, or opportunity areas with designers. In this case we introduced home-care nurses from ZuidZorg to the Empathic Adventure, a platform to dig under the surface and draw out through the journey their knowledge

about the elderly people they work with on a daily basis.

In the second phase of our process, the problem areas that the nurses defined were built upon during an ideation workshop with managers and leaders of the organisation working together with designers. The goal of the workshop was to empathically and actively co-design new pilot projects that Zuidzorg can nurture and implement.

Part 1: Home Care Nurse Empathic Adventure Workshop

Two workshops were organised for home care nurses who cared for elderly people in their own homes on a daily basis, and we prepared a toolbox for the Empathic Adventure with a process designed that first saw them on the journey, and then supported them in defining relevant problem areas. The nurses were introduced to Betty's story and as part of their Empathic Adventure were given directions to the local grocery store and a shopping list to complete. A collaborative reflection workshop was prepared with questions to support their analysis and allow the nurses and designers to uncover key themes during an analysis of their experience and observations. A simple but powerful method to express to visualise problem areas they found the most important and relevant to be addressed in the next phase. They created billboards 'selling' their opportunity to the organisation.



Results: well framed and relevant design problems to be picked up on in the follow-up co-design workshop.

AARGHH!!!!

Things go too quickly, and all at once! Being restricted by your own body, and having no control on moments where you have to do many actions at the same time makes it extra stressful.

NEGATIVE DOMINOS

You are always making compromises because of your limitations, and this can have a negative domino effect.

KNOWING HELPS

ZuidZorg is not the only one that helps our clients, the others in their surroundings also need to know how to help so they don't feel like a nuisance having to ask.

HEY SOCIETY! EVERYONE IS WORTH CHATTING TO!

When there is no interaction you feel less like you are part of society and feel left out.

SAY YES!

If someone is told "no" too many times, they feel like a nuisance and don't ask anymore for help.

Part 2: Ideation Co-Design Workshop

In a follow up co-design workshop with some of the decision makers in ZuidZorg, home-care nurses and designers these problems were build upon and led to the creation of potential pilot projects that can be further refined and tested. This combination of participants created a positive tension with the designers pushing for what COULD be done and the care organisation knowing what CAN be done. We included two different methods to build empathy and understanding with the problem areas they

were designing for; a story analysis of Betty's journey and a short Empathic Adventure. The photo story analysis designed together with Maartje van Gestel saw three phases; objective observation, audio story from Betty's reflection, and a last step of watching a video story. With the help of specially design tools, finally the teams of 4 took their deeper analysis and understanding to each address one of the problem areas by brainstorming new ideas and finally framing pilot projects on the Pilot Canvas tool.



Results: relevant new ideas that the care organisation can adopt and implement with a low threshold.

Pilot 1: An aid doesn't need to be boring!

- Relying on existing creative programs that ZuidZorg and Punt Extra offer, we can create workshops for elderly to personalise their (mobility) aids.
- Fulfilling a need for distraction through social contact, people will be triggered to comment or notice you and create a conversation.

Pilot 2: Tweaking the system - a new kind of volunteer.

- Building on the volunteer system that ZuidZorg already has for their meal delivery program, they can diversify the kinds of people that will volunteer as they increase the kinds of actions they can do, for example they could stay for dinner, or help with things around the house
- Raising the quality of life for both volunteers and clients is a win-win situation.

Pilot 3: Giving a kick in the butt!

- Making people less dependant on care, and preventing them seeing care as something to consume and making care more efficient.
- Coaches come and work with clients to re-distribute the care they receive and support them to make small changes for themselves to improve their quality of life.

(PART 4) REFLECTIONS AND NEXT STEPS

The aim of this case study was to research how stories create value while innovating new services for older people. Storytelling tools and methods were created to trigger the knowledge of experiences nurses, connect it to new perspectives and understandings, then to apply it to the design of new innovative ideas for the older people they serve. During the process we learned that when given a platform such as the Empathic Adventure, the knowledge of the care professionals (nurses) is unpacked in the design process, and that following this with a co-design workshop, the managers and leaders are able to connect to these insights through the same stories and create new ideas for the organisation to implement. This organisational process

saw different people contributing with their own knowledge and skills in relevant ways. We see that storytelling can play a key role connecting knowledge and experience in an empathic way to new value creation through the design of realistic and exciting new ideas for elderly people. ■

Problem 1

AARGHH!!!!



Things go too quickly, and all at once! Being restricted by your own body, and having no control over moments where you have to do many actions at the same time makes it extra stressful.

- *e.g. at the cashier you need to check prices, hand over money, take change, handle the receipt, be quick, pack groceries all at once.*

Problem 2

NEGATIVE DOMINOS



You are always making compromises because of your limitations, and this can have a negative domino effect.

- *e.g. bad personal hygiene because it's too much work to care for yourself.*
- *e.g. you don't buy certain things (food and clothing) because they cost too much.*
- *e.g. loneliness because it's too much effort to go out or invite people over.*

Problem 3

KNOWING HELPS



ZuidZorg is not the only source that helps our clients, there are others in their surroundings who also need to know how to help, so that older people don't feel like a nuisance having to ask.

- *e.g. people in the supermarket aren't helpful in the right way for older people.*

Problem 4

HEY SOCIETY! EVERYONE IS WORTH CHATTING TO!



When there is no interaction you feel less like you are part of society and feel left out.

- *e.g. people look at you when you walk around, but don't talk to you and it feels unnatural. Older people don't bite!*

Problem 5



SAY YES!

If someone is told 'no' too many times, they feel like a nuisance and don't ask for help anymore.

→ e.g. *When there is extra time, nurses offer to do something extra. However they end up having to say 'no' because they are asked to do things they are not allowed to. Then people feel like a bother and stop asking altogether.*

"I'm so happy that we have the chance to do this, I feel so often that I have so much knowledge about the people we work for and nobody uses it. This gives me the chance to contribute."

"You figure out easily how quickly things go for older people, and how much energy it takes to do everything, I needed to make choices based on my energy level."

"I think its great to think together about changes – how my input can help the older people, what I am doing here can help them."

Phase 2: Ideation co-design workshop

In a follow up workshop with some ZuidZorg decision-makers, home-care nurses and designers used these opportunity areas to build upon, leading to the creation of potential pilot projects that can be further refined and tested.

This workshop consisted of 14 participants, half of whom were designers, in order to stimulate a co-design approach. We included two different methods to build empathy and understanding with the opportunity areas to be worked on – a photo analysis of Betty's journey and a short *Empathic Adventure*. Finally, the teams of three each addressed one of the opportunity areas by brainstorming new ideas using the Pilot Canvas that was designed specifically to help them frame and detail pilot project ideas.

{STATS}

AGEING IN PORTUGAL

- Portugal is the westernmost country of mainland Europe, being bordered by the Atlantic Ocean to the West and Spain to the East.
- Aveiro is a city and a municipality in Portugal. It is the second most populous city in the Centro Region of Portugal, after Coimbra. Located on the shore of the Atlantic Ocean, it is an industrial city with an important seaport.

Life Expectancy

79.01 YEARS OLD

Median Age

41.1 YEARS OLD

Total Fertility Rates

1.52 BIRTHS PER WOMAN

Flag



Size (sq.km)

92,090

Population

10,813,834

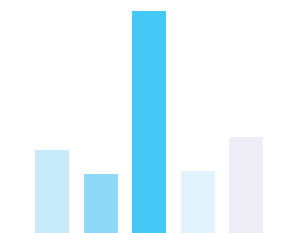
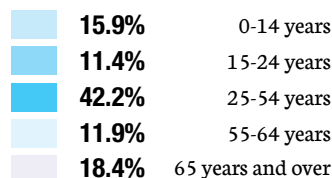
Ethnicity

96.1% Portuguese

1% Brazilian

2.9% Others

Age Structure



Retirement Age

65 YEARS OLD

RETIREMENT PROTECTION

1935

- Launched the framework for the creation of a model corresponding to the then in force - in many European countries - compulsory social insurance system.

1963

- The method of financial equilibrium of pension institutions was changed, allowing improve existing services and extend protection to for maternity and charges family. Aiming to make pension institutions closer to the workers and their families, their land base has become predominantly regional, except in regard to the contingencies of invalidity, old age and death, for which the National Pension Fund was created.

1976

- The Right to Social Security is implemented through the Social Security system embodied in successive laws of bases that were setting the national and international social and economic developments and the organic structure.

1977

- The social pension was established initially in purely charitable terms, your personal ambit is subsequently extended to all people over the age of 65 who did not exert any paid and were not covered by any pension scheme.

90s

- Access to pension is standardized to the age of 65, establishing equality between men and women.

2000s

- The formula for pension calculation was revised, considering different income bands and privileging longer working careers. It is also introduced a solidarity supplement for retired people over 65 with low pension incomes and established a dependency supplement, for pensioners, invalidity and survivor of the general social security scheme and the non-contributory pensions and similar arrangements that are in a situation of dependence.

Chapter 15

**COMMUNICATION
DESIGN FOR
ALZHEIMER'S DISEASE:
UNDERSTANDING
THE DISEASE AND
FACILITATING
INTERACTIONS THROUGH
COMMUNICATION DESIGN**

By Rita Maldonado Branco

How Did It Start?

The researcher was always very connected to her four grandparents. They were already in their 60's and 70's when she was a child, and she remembers them as being very active.

At present, two of them are diagnosed with Alzheimer's disease and one was more recently diagnosed with fronto-temporal dementia. The fact that her grandparents were once active and inspiring people and now they are in moderate to advanced stages of dementia was the main motivation to start working and responding to this issue through design.

Current Situation

The three grandparents with dementia are already completely dependent on care for their daily activities.

Their pensions are low and not enough to afford all the expenses for care that they currently need, therefore the family needs to extend financial support. It was decided by their families to maintain them in their homes as long as possible.

Engagement With Researchers

For the project 'Communication design for Alzheimer's disease', the researcher observed closely the daily life of her two grandparents diagnosed with the disease, mainly taking note of their interaction and communication with others and specific everyday challenges. She also referred to previous episodes or stories that had happened throughout the progression of the disease.

Prototypes were tested with the users to better adapt the outcomes to their needs and difficulties, as well as to identify the relevance of the products proposed.

Who Are the People?

These are two families from different towns in Portugal. Family Branco is from Aveiro, a small city near the sea in centre-north of Portugal, that was once mainly dedicated to salt extraction and is now an university town. Both with a degree Pharmacy, they were well established with their pharmacy business.

Family Maldonado is from Macedo de Cavaleiros, a small town in the Northeastern region of Portugal, close to Spain. It used to be a rural region, very catholic.

What Are They Doing?

At present, they are all over 90 and three of them dealing with dementia.

Individual Ageing Stories

The following stories describe the life and ageing of the researcher's four grandparents.

1. Grandfather Vasco Branco



Vasco Branco was a pharmacist, and also fiction writer, filmmaker, painter and ceramist. He was born and lived most of his life in Aveiro. After studying painting and ceramics, he then went on to graduate in Pharmacy at the University of Porto, and established his own pharmacy in Aveiro, with his wife Maria Elisa, also pharmacist. The success of his pharmacy business allowed him to share his time between the practice and his arts. During his active life, he produced several amateur short-films that won awards worldwide. He published 14 books of fiction, and had a ceramics workshop where he created objects and artworks, as well as paintings.

In 1977, he produced his last film, and his last book was published in 1994. Upon being diagnosed with Alzheimer's disease in 2000, he slowly retired from the pharmacy business, but continued producing ceramic art and paintings. In 2005, at the age of 86, he held his last exhibition of ceramic work. Vasco is now in mid-stages of dementia, withdrawn and difficult to communicate with, and he barely remembers his prolific work.



2. Grandmother Maria Elisa Branco

Maria Elisa is also a pharmacist. When her children were little, she stopped working at the pharmacy and dedicated her time to the family and the house. At the age of 52 she enrolls on a Philosophy degree.

Along with caring for his husband Vasco, diagnosed with Alzheimer's disease, she maintains her strong interest in politics and economics, following attentively the news on TV. She is concerned about her physical and mental health, and does simple exercises, as well as reading and memorising numbers to keep testing her memory.



3. Grandfather Júlio Maldonado

Júlio Maldonado owned a shop in the centre of a small town in Trás-os-montes, the Northeastern region of Portugal. When he retired, he continued doing accounting work for several local businesses. He would go for a walk everyday and on the warm days, he would swim in the municipality pool.

He continued singing in the church choir every Sunday, and often created poems for the anniversaries and special events of the family.

In the summer, he and his wife Rita, would go to Porto for several weeks, where they would take their grandchildren to the beach everyday. With advancing age, he is gradually losing his sense of hearing and was recently diagnosed with fronto-temporal dementia.

4. Grandmother Rita Maldonado

Rita Maldonado was a housewife, taking care of her family, and helped in the church. She has a strong catholic background and also gave catechism classes. She would also help Júlio in the shop with window decoration, and during busier days of business. She was an excellent in cooking, knitting and crochet, activities that she kept doing until becoming very forgetful and was subsequently diagnosed with Alzheimer's disease.

Background & Introduction

This project was developed by the designer Rita Maldonado Branco, as part of the MA Communication Design programme at Central Saint Martins, University of the Arts London. Dr. Rathna Ramanathan and filmmaker Victoria Salmon supervised the work. Rita continued this research after her MA, while working part-time with the Design Against Crime Research Centre.

She has recently been awarded a scholarship from the Portuguese Foundation for Science and Technology

(FCT) to further research on this theme, as part of the PhD programme in Design, at the Fine Art Faculty, University of Porto in partnership with University of Aveiro and the Institute for Research in Design, Media and Culture (ID+) Portugal. The research focuses on the communication between people with dementia and their families, considering whether codesign strategies can be adapted to the context of dementia care and if communication design can enable empower people with dementia and their families to create their own personalised strategies for communication and interaction.

City/Country & Timeline

- The project started in early 2011 and the work presented here was developed until June 2012. Although the research focused and included her grandparents in Portugal, the work was mainly developed in London, as part of Rita's MA at Central Saint Martins.

Addressing Issue (s)

The study is based on the researcher's perspective as a graphic designer, and her first-hand experience with two grandparents with mid-stage Alzheimer's disease. Being already immersed in the context of the study, the research draws upon ethnographic and participatory methods. Adapted to the needs and capabilities of the users, involving secondary stakeholders - family members in this case, taking into account the risk of overstimulation and harm the user.

Through the development of visual outcomes, the project tried to respond to two key issues related with Alzheimer's disease and communication: the need to communicate about dementia, raising awareness and understanding about the

condition, as well as the difficulty in communicating and interacting with people whose memory and communication skills are weakened.

What if graphic design had dementia?"

Project Organisation

The project can be divided in three groups of development and outcomes. The first group looks at the way information about Alzheimer's disease is made available, making visual what is usually written. It considers whether this kind of approach contributes to the understanding of Alzheimer's disease and other dementias, how they relate and what symptoms are inherent to them, helping to raise awareness among the general public. Due to difficulty of communicating with the grandparents with mid-stage Alzheimer's disease, family members were interviewed, and additionally, focus-groups were created with people who had experience dealing with people having dementia, to understand how relatives experience the disease, how they accept and deal with it and what are their information needs.

In order to get deeper insights on the condition, observations were conducted to take note of the researcher's grandparents' daily life and interaction with other family members and care workers. In parallel, an exercise of recollecting past instances was made together with the family to understand how symptoms started being noticeable and how they evolved throughout the years. This data informed the

second group of outcomes that questioned, "what if graphic design had dementia?" The same idea of providing different ways of communicating what dementia is, was explored in a more experimental way, towards trying to convey how it would feel to have some of the symptoms interpreted graphically.

Drawing on good practices of design for dementia as well as on the previous exercises, and data collection, specific everyday life challenges of the two people studied were used as inspiration for the development of tools to facilitate the communication an interaction between people with Alzheimer's disease and their relatives and carers. These tools involved the participation of family members. Ideas were prototyped, tested with users and iterated, also taking into account the possibility of generalising these outcomes in order to be used by others.

What Happened?

Groups 1 and 2 are different approaches that address the need for raising awareness and improving understanding of Alzheimer's disease and dementia.

Group 1:

This group focused on information, and some visualisations of facts and figures on dementia were produced, such as mapping the differences between the several diseases that provoke dementia and its symptoms, and how can they differ from normal ageing (fig. 1).

Group 2:

The second group of outcomes looked for deeper insights on how Alzheimer's disease affects people and used a more expressive and experimental approach, translating symptoms through graphic interpretation – as if graphic design was affected by these symptoms.



Fig.1 Map of dementia causes and symptoms and what is normal part of ageing.

- **Memory loss:** three second-hand books were altered based on different aspects of memory loss (fig. 2, 3, 4).
- **Disorientation:** The common feeling of disorientation was represented through the transformation of a map (fig. 6).
- **Confusion:** Due to memory loss, people with Alzheimer's disease become progressively confused, misplacing objects, not recognising people and places and not being aware of time. Another book was redesigned to communicate this symptom of confusion through typographic variations (fig. 5).

Group 3:

Inspired by the specific challenges observed in daily life of the two grandparents with Alzheimer's disease (Rita and Vasco), simple tools were developed to facilitate interaction with family members and carers. These outcomes are not aimed at improving the memory of someone with Alzheimer's



Fig. 2 A Delicate Balance. In this play, one of the characters was chosen to have Alzheimer's disease. The other characters are progressively forgotten throughout the book.

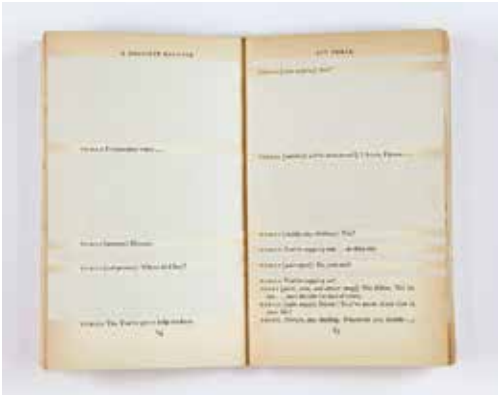


Fig. 3 Digging the Past. Lines of text are increasingly cut from the pages throughout the book, resembling what physically happens in the brain of people with Alzheimer's disease.



Fig. 4 Playback. Considering the symptom of repetition, implicit from memory loss, the first pages of the book are repeated throughout the book.



Fig. 5 The Book of Genesis according to Vasco Branco. Progressive typographic changes represent 4 types of confusion: objects, people, places and time.



Fig. 6 Disorientation map.



Fig. 7 Card Game. On the front of the card, there is close-up picture, showing the face clearly; on the back, the name of the person, a brief description and a question redirecting to another card.

disease, but a facilitator for starting conversations and interactions.

- **Card game:** A set of cards was produced to encourage conversation about something that is meaningful for the person with Alzheimer's disease. In the specific case of Grandmother Rita, each card corresponds to a family member. Size, layout, typography and content were tested with the user through prototypes, and improved upon. Grandmother Rita engaged with the game and showed interest on the pictures and their descriptions. It conversations in a playful way and allowed different levels of interaction. The final outcome is also a template that can be filled and personalised according to what is more appropriate to the person with Alzheimer's disease - not only people, but also places, objects, etc (fig. 7).
- **Family book:** A book compiling letters written by the family members to Grandfather Vasco, was produced. Appropriate layout and meaningful typography were considered, highlighting names and words that could possibly trigger some memories. This was an alternative approach to the card game, which was not suitable to Grandfather Vasco. He was never enthusiastic about cards and it is quite demanding to communicate with him, as he is very passive. However, although not very common in people Alzheimer's disease, it was observed that he spends many time reading. Therefore, this was an attempt to use this medium to reach him. He became very attached to the book, reading it several times a day, and had some spontaneous verbal interactions, asking about the people in the book. The care workers would also

use the book to encourage conversation (fig. 8).



Fig. 8 Grandfather Vasco reading the book.



Fig. 9 Table mats.

- **Table mats:** A set of table mats with the silhouettes of the cutlery and crockery was created to guide the task of laying the table. Grandmother Rita used to be a housewife, therefore she was always keen on helping out at home. As procedural memory is affected, simple tasks like laying the table can become quite complex. The testing used a tablecloth with the same drawings. Plates and cutlery were placed in the centre of the table and the drawings were showed to her. She was able to make the link between the visual representation and the object and managed to lay the table on her own (fig. 9). The table cloth evolved to making it more flexible and diverse, thus more accessible to others. ■

AGEING IN SWEDEN

- Sweden, officially the Kingdom of Sweden, is a Scandinavian country in Northern Europe. Sweden borders Norway and Finland, and is connected to Denmark by a bridge-tunnel across the Øresund.
- Alvesta Municipality is a municipality in Kronoberg County, southern Sweden. Its seat is in Alvesta. The present municipality was created in 1971, when the market town (köping) Alvesta (instituted in 1945) was amalgamated with four surrounding rural municipalities.
- Retirement protection development is in place in Sweden.

Life Expectancy

81.89 YEARS OLD

Median Age

41.2 YEARS OLD

Total Fertility Rates

1.88 BIRTHS PER WOMAN

Flag



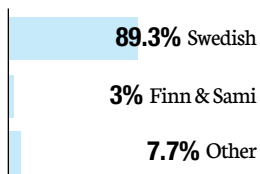
Size (sq.km)

450,295

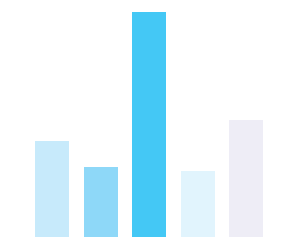
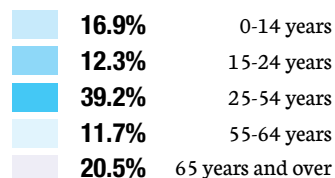
Population

9,723,809

Ethnicity



Age Structure



Retirement Age

65 YEARS OLD

RETIREMENT PROTECTION

1914

- Introduced a public pension scheme consisted of an old-age pension plan and disability insurance which was compulsory and applied to virtually the entire population.
- The pension was small and was payable from the age of 67, earlier if the recipient was unable to work.

1948

- Basic retirement pension was set up.

1960

- The national supplementary pension scheme was introduced as a pay-as-you-go (PAYG) system.
- The size of a person's national supplementary pension depended on her or his income during the fifteen years with the highest earnings.

1988

- A proposal for a new pension scheme was approved by the Swedish parliament, which was based on an agreement between five parties, the Social Democrats, the Moderates, the Liberal Party, the Centre Party and the Christian Democrats.

1999

- The new provisions were forced and the reformed pension scheme include a number of components:
 - > an income-related pension
 - > a prefunded pension
 - > a guaranteed pension

2000

- Full basic retirement pension was in place:
- For a single person: amounts to SEK 2928 per month
- For retired married couples: receive SEK 2394/person per month

2001

- The first payment under the reformed system was made. Pension was based on one person's full life-time earnings and a guaranteed pension provides basic security of income.

Chapter 16

AGEING IN ALVESTA— HOW CAN AN IMMERSIVE DESIGN PEDAGOGY SUPPORT BETTER LIVES FOR AN AGEING POPULATION?

By Sara Hyllén-Cavallius

Introduction

The Ageing and Ingenuity Lab at the Design Department, Linnaeus University, Sweden, was set up in 2013 by Sara Hyltén-Cavallius, an architect turned educator and researcher, and Stephanie Carleklev, designer and educator. We were keen to explore ageing, as we see dignified ageing in its own right, and the reality of an ageing population, as intrinsically linked to long-term social, cultural, ecological and economic flourishing – that is, sustainability. Therefore it was also natural to involve the students on the BA degree programme, Design for Sustainable Development in the work on ageing.

The three year long programme employs a pedagogy of which a core is students' immersive learning in order to foster empathy for a wide range of circumstances and people. The work described here took place within a course placed in the fifth term of the programme. This course is delivered in English, enabling international intake. In the relevant year, the course drew students from Germany, the Netherlands, Turkey, New Zealand, Taiwan, as well as Sweden. The course was initially focused on the experience and conditions of asylum seekers, waiting for their application to be accepted, or refused and forced to go back to their country of origin. This project enabled the students to gain insights into a reality far from their own, and to see both themselves and their emerging design skills in new light. The desired ultimate learning outcomes of our more recent focus for the course, ageing, is not dissimilar. For many a young student, ageing is as alien as the reality of having to fight for residency. With the demographics unequivocally pointing to an ageing population as a whole, and

the simultaneous extreme focus on youth in popular culture, we felt ageing was an auspicious topic to address with (young) students. In year 2012 we therefore focused on elderly our collaboration with Allbohus, a housing company owned by Alvesta municipality. Alvesta is a municipality of 20.000 inhabitants, situated in the region of Småland.

Ageing in Alvesta and Sweden

The Swedish age of retirement is 65 (with some variations downwards and upwards depending on profession and personal situation). The retiree receives both a pension from the government and from former employers. Nowadays, for those who have been able to afford it, it is also common to also have a private insurance. This means that the pensions for the elderly vary significantly. Some senior citizens are poor and some are rich.

The majority of retirees continue living 'at home'. This is possible for people suffering from poor health too, since the municipality will supply care within the home. (For example, a nurse can visit every day, and meals can be brought to the home.) Another option, to rent an apartment in an older people's home, is not always possible, since there is often a waiting list for several months or even years, if your health is not 'too bad'. Yet another option is to move into an apartment in an estate purpose-built for senior citizens. In this scenario all tenants are over 50 years old. Everybody has a flat of their own, but there are communal spaces, and activities organised in the building, and easy access to healthcare. Rooms have wheelchair access. Residents

elect to manage cooking and cleaning themselves, or pay for a service.

Research Setup and Process

For two years running, the Ageing and Ingenuity Lab has conducted a project where students on the BA Programme Design for Sustainable Development collaborate with Alvesta municipality on ageing.

From the educational perspective, the purpose of the project was:

- For the students to gain a deep and nuanced understanding of the predicament of the local elderly population.
- To inspire curiosity to explore ageing generally.
- To support students to attune design skills to improve conditions for a local ageing population, in terms of physical and emotional health and wellbeing.

From the research perspective, the purpose was also to explore how the immersive pedagogy could mobilise students' empathy and curiosity. In addition, it was hoped that the project may show the municipality that design can play a role in planning and caring for an ageing population.

During the ten-week course, the students explored ageing in a range of different ways (with slight variations over the two years that the course has been running). As a group they shared theory, lectures delivered by representatives from the municipality and elderly, workshops and fieldtrips. To allow the students to immerse themselves in the context, they each spent several days working in homes for the

How can I as a designer create new social networks through a workshop?

elderly. Three homes, deemed typical of the region, were selected for this purpose. The work experience allowed students to identify needs from the 'inside', and to discuss these with both the people living in the homes, and those working there. The students also met elderly living in their own homes and in hospitals and took part in everyday activities with elderly. Again, these experiences allowed them to, in different ways, discuss and understand how elderly live their lives. Students worked closely with an individual they had met during the research phase, to develop solutions for, or responses to, their specific needs. The students could choose to also team up with other students or work independently, in close liaison with their 'client', and tutors.

The insights from the work experience, and other close contact with the elderly was profound for many of the students, as the generic elderly gave way to both strong and vulnerable individuals in the students' eyes. Another core element of the project constituted the students exploring their own ageing. They created scenarios of their own life story into old age, using the media of moodboard or short film. At times this generated strong emotional responses and a new degree of empathy and awareness



of notions of memory and dignity. Yet another approach to engaging students has been to discuss elderly that have meant or mean much to them personally. Last year several students had grandparents that had recently died, and it was a very emotional session.

The group discussions have been enriched by the diversity of the student group, which enabled international perspectives on ageing.

The students have experienced that there are big differences in terms of help offered from society, how involved a family is in the elderly, how the elderly manage their lives, as well as the status or perception of the elderly in a culture. As students' 'dreamt' their own age, the new perspectives became immediately relatable to them, as they realised, for example, that help cannot be taken for granted.

A common reflection during the two years of running the course is that elderly people in Sweden are excluded from society in many ways. In Sweden your identity is very much tied to what you do, and participation in social life also often work related, such as meeting colleagues after work. It is also the case the

few Swedes live in extended families. An adjacent observation is that childcare is also normally catered for by the state. As a person retires it is therefore easy to get both lonely and 'lost' as a vital aspect of your identity is gone. We believe this is a big problem in the Swedish society.

Project Outcomes

The students mapped the needs of specific representatives of the elderly they met during the research process. In close dialogue with this individual, and with tutors, the students developed a response to a need, from early sketch to prototype. Project topics span products, services and experiences to promote healthy eating, support social cohesiveness, and to promote the sharing of thoughts on death.

Here we include abstract of three projects from the 2013 cohort, indicative of the range.

Medicine Box by Frida Wård

In this project, I have studied our approach to the elderly, older people's views of themselves and the relationship to their own body, ageing, their everyday lives and their homes. Through research, analysis of products designed for the elderly, interviews with the elderly, I have developed a concept for the younger elderly. I have based my concept on a person, Sven-Erik who is 68 years old. He has problems taking his medication on time. I have created a medicine box that not only is more functional, but also has a larger 'soul' than the existing products in the field. The project aims to create an object that is more appealing to this individual, and corresponds to his sense of identity and his needs. I also wanted to propose an alternative to the plastic hospital connotations found in other products targeting this audience. The goal of

the project is to give the object and its users more value, with the hope that the object will be inherited from one generation to another.

Seven Kinds of Cakes: Coffee Party As Social Networking by Malin Hultman

I am interested in the prototypical Swedish old lady, and her interest in baking, as evidenced by the best-selling Swedish cookbook *Seven kinds of cakes*. I wanted to celebrate this skill, and use it to get senior citizens and immigrants to meet.

How can I as a designer create new social networks through a workshop?

I have used baking as an activity to create meetings between groups with few or weak social networks. Desired secondary effects are greater integration and knowledge of Swedish culture, and to increase the status of the classic Swedish tradition in baking, thereby lending more status to elderly women. I start the workshops with an introduction to the traditional 'kafferep' – a Swedish daytime social event with coffee, cakes and gossip. I also discuss the importance of social networks and sites. Then we bake, exchange recipes and have coffee and cakes together and talk.

Pierieliepiepielo by Rob van de Wetering

The overall aim of this project is to illuminate the impact of music on people suffering from dementia and to provide a way of playing music that patients can activate themselves. Research shows that if patients listened to background music they seemed to communicate with improved cognition and language and also felt physically better. They were also less aggressive to caregivers and family. People that suffer from dementia

are unable to solve problems themselves. Their caregiver may not be always around to entertain them although it is important to provide a good atmosphere. I developed a cushion that activates music playing when leaning against it, because the simplest task a patient that suffers from dementia can perform is sitting. A device starts playing music when a sensor has been activated by leaning or hugging. As soon as the patient releases the pressure on the sensor, the music will stop playing. Favourite music can be stored by the caregiver or family member. It is suggested that a person with dementia should listen to music of their own choice. Most popular seems to be music they listened to when they were young.

The designs presented above all carry potential. However, most importantly they show the leap these undergraduates made, as they immersed themselves in the reality of old age, its diverse manifestations and needs. For these students the elderly will no longer be a homogenous community, an 'Other'. They are now both visible and interesting to these young people. They also see old age as an intrinsic part of their own life experience – albeit far away in time. The course opened up a new design field for the students, which is now as real in their minds, as such design pursuits which more obviously rise to the top in media, exhibitions, and general discourse. The individual elderly people appreciated their interactions with the students, and enjoyed sharing stories, and discussing their needs with them. The municipality is keen to continue our collaboration.

Conclusion and Discussion

This constitutes a small and exploratory study, where the emphasis was placed on setting up learning experiences that allow students to gain an inside, and changed perspective on ageing and old age, towards



applying a broad range of design skills and approaches to the pressing certainty of an ageing population.

We believe that the topic of ageing has a place in design education, as the reality Sweden as well as many other industrialised nations is that of an ageing population, with repercussions on social, cultural, financial and ecological systems – but also unharnessed opportunities! It is therefore imperative to mobilise insights from a range of disciplines that can shed light on the many faceted issue of ageing.

However, opening up forums to discuss ageing, in the educational context, as well as more generally, is equally significant in terms of facilitating discourses and practices which explore life in its many forms, its wonder and messiness. In Sweden, like many similar Western societies, and following a long trajectory of alienation, the reality and even normality of old age and death, is often shied away from, removed from the everyday, and dressed in medical language and ‘clothes’ (like the student above pointed out). We believe that explicitly embracing our own full lifespan is also essential as we try to meet the global challenge of unsustainability. This requires both emotional and cerebral engagement, and deep connection with what it is to be a human today.

Our first course with the students focused on homes for the elderly, while the second



iteration concerned seniors living on their own. This autumn our current cohort will explore the predicament of ageing as it is more generally manifested in the municipality of Alvesta. “What it is like to live as an elderly person in a place like Alvesta?” “How can we place the elderly, their stories and needs at the centre of our understanding of a community?” Our small but keen Ageing and Ingenuity lab is also broadening its focus and approaches. A new research project, in its pilot stage, is using the method of shadowing (sharing the life of an individual for a short period of time, to gain inside understandings) to explore living circumstances and homemaking, needs of privacy, togetherness, accessibility, safety from youth to old age. This project will result in guidelines for architecture with a further emphasis of flexibility and diversity in living arrangements. ■



{STATS}

AGEING IN THE UNITED KINGDOM

- The United Kingdom of Great Britain and Northern Ireland commonly known as the United Kingdom (UK) or Britain is a sovereign state in Europe.
- London is the capital city of England and the United Kingdom. It is the most populous city in the United Kingdom, with an urban area of over 9 million inhabitants.
- Retirement protection development in the UK.

Life Expectancy

(at birth as of 2014)

80.42 YEARS OLD

Median Age

40.4 YEARS OLD

Total Fertility Rates

1.9 BIRTHS PER WOMAN

Flag



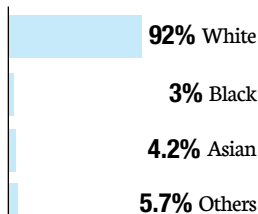
Size (sq.km)

243,610

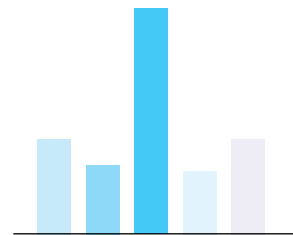
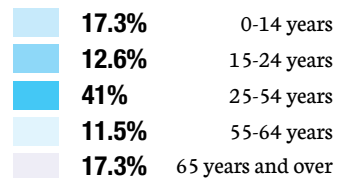
Population

63,742,977

Ethnicity



Age Structure



Retirement Age

65/62 YEARS OLD

RETIREMENT PROTECTION*

1693

- First organised pension scheme for Royal Navy Officers existed.

1908

- Introducing The Pensions Act. It paid a non-contributory amount of 5 shillings (about 25p – worth about £23) a week, from age 70, on a means-tested basis from January 1 1908 – “Pensions Day”.

1925

- Introducing Contributory Pensions for manual workers and others earning up to £250 a year. The pension was 10 shillings a week (worth about £25) from age 65.

1946

- Contributory State pension for all. Initially pensions were £1.30 a week for a single person and £2.10 for a married couple. Paid from age 65 for men and 60 for women, effective from 1948.

1978

- State Earnings related Pension Scheme (Serps), a state pension in addition to the basic state pension for employed individuals (the self-employed were not eligible) and was based on earnings between the lower and upper earnings limits (LEL and UEL) commonly known as ‘middle band earnings’.

2001

- Stakeholder pensions, a low-cost pensions scheme aimed at people on low to average earnings and helping women save for old age.

2002

- Serps switched to the State Second Pension (S2P) scheme, targeting greater resources at the lower paid and some individuals who cannot work due to disability or caring responsibilities.

2011

- Warm Home Discount Scheme to help vulnerable and low-income households with their energy costs. Pension Bill & rising in State Pension Age from 66 to 67.

2012

- Automatically enrolled in workplace pensions began.

* Sources: <http://news.bbc.co.uk/2/hi/business/4436308.stm>
http://www.web40571.clarahost.co.uk/statepensionage/SPA_history.htm

Chapter 17

FLEXIBLE DWELLINGS FOR EXTENDED LIVING

By Ann Light

Introduction of Research

The FLEX (Flexible Dwellings for Extended Living) project explored the boundaries of private and public living, to make dwelling more socially flexible for people as they age. It was a collaboration with UK specialists in built environment, elderly care and housing and public participants in venues in Newcastle and Dundee. Both experts and the public participated in co-design workshops that focused on how future generations of older people might dwell more socially as they age, better serving companionship, resource sharing and social resilience in the community. It ran from February 2012 to April 2013, funded by the Arts & Humanities Research Council through the Community,

Culture & Design theme of the Connected Communities research programme.

Who Are The Team?

The FLEX research team comprised:

- Professor Ann Light, Northumbria University
- Andy Milligan and Linsey McIntosh, Duncan of Jordanstone College of Art and Design (DJCAD), University of Dundee
- Lowri Bond and Carol Botten of Northern Architecture

- Local partners, such as the Quality of Life Partnership and ISOS Housing Ltd in Newcastle.

How Did It Start?

FLEX launched with an experts' workshop to develop initial strategies. Findings emerging from this first event were used as stimulus to inspire the shaping of the workshops for community participants. We then sought the views of the public and brought together groups of urban dwellers aged 40+, first in Newcastle, then Dundee, to talk about how they might like to live as they age. Participants represented a rich mix: some owned their homes; others rented privately; whilst some were in social housing or other arrangements. Some were living with two more generations; some had the place to themselves. What are they doing?

Addressing Issue(s)

The population in Britain is ageing rapidly, but it is widely acknowledged that the UK is unprepared for the acute financial and social changes this will bring.

New models for living with choice, independence and dignity are in short supply. Older dwellers often have to accept expensive institutional care that compels individuals to live as a community of strangers. Institutional and private care spaces may resemble student halls, dorms and barracks, at a time when patterns of social life are markedly different. Such moves to care facilities also reduce the roles that elders can play in the general community, making them invisible and taking their experience out of circulation.

Meanwhile, the 'third places' that brought people together in times past, such as the local

We live and grow old, or, what it means to live a life fully at every stage.

pub, corner shops, local libraries, markets and community centres are dwindling due to changes in society and an increasing digital life for many. And social spaces that appeal to younger people or people with young families do not necessarily hold interest for empty nesters and older people.

Whilst there is significant research and information on assisted living and staying physically independent at home, there is less work on the social aspects of wellbeing, our emotional connections to home, its locations and valuing of the community in which we live and grow old, or what it means to live a life fully at every stage. There is also a tendency to see older adults as needing care, with reducing agency and self-efficacy as they age. However, a strong argument also exists that sense of agency and a chance to show efficacy enhances life and prolongs health, so treating older people as inherently dependent actually exacerbates the problems they face. How, instead, might design support older people to age as a vital part of their communities?

FLEX worked with the idea of conviviality. The word comes from the Latin *convivialis*, and refers to 'living with' but also banqueting and making merry. Here we stress something

wider than planned social encounters and immediate jollity to include the broader conviviality of living among others with warmth and care, including those who are not immediate friends and family. It is not a fixed quality and does not only belong to some people not others. It is about growing and maintaining relations.

Project Organisation

FLEX hired a café venue in each city – reflecting those critical ‘third-space’ areas used to trigger social conversations – and designed a workshop around a high tea experience, serving guests sandwiches and cake. Both savoury and sweet courses were accompanied by questions for participants to discover. ‘Courses’ in this high tea workshop were linked to key questions we asked of participants about ‘home’ and ‘sharing’. Passing the jam and tasting the scones was as integral as finding the questions among the cakes. Participants in ‘high tea’ workshops didn’t know each other so when we invited them to talk to us we decided we needed to make it convivial and easy to chat. Conversations were informal and strangers talked about intimate things like sharing laundry spaces. They left with spare food to share with someone else as a model of conviviality and breaking boundaries.

What Happened?

In conversation, FLEX participants recognised how social and spatial elements of their world can be configured to improve a sense of shared spaces over time (e.g. street-parties, BBQs on communal land, clearing litter or co-gardening) and these afford strangers an occasion to meet and talk. Other points of contact include walking dogs, pushing babies, collecting kids from school, and the weather. Designing the social, as well as physical, fabric of life can trigger

serendipitous conversations and support convivial ageing.

Participants raised concerns that some groups of people are more prone to loss of bonds than others. They considered that older men (particularly if alone) are most vulnerable to chronic social isolation and to losing/missing conviviality and socially-oriented sharing. What works for young people will not necessarily sustain people as they age and a sense of this and some forward planning by individuals and groups can make a substantial difference to how life shapes up. However, there are barriers: people spoke of society’s increased desire to protect vulnerable community members, such as young and older people, and how it works counter-productively. It makes behaviours seem risky that have traditionally strengthened social networks at a neighbourhood level (neighbours involved in childcare, sharing, acts of kindness, popping in, etc).

Design Solutions

FLEX developed the concept of Porous Design. The workshops revealed the significance of sensorial aspects to give character and a feeling of connection to a neighbourhood. Participants in Newcastle and Dundee both described how they enjoyed sounds and smells that indicated the presence of others (within reason) and discussed how they valued sightlines that allowed them to see others and their routines unfold. However, participants hated loss of control over their living space, such as noise from above, suggesting that spaces require filtering of surrounding activities in a flexible way. And we noted a trade-off between an ambient stream of social information and the sealing of dwellings needed to regulate temperature and control energy consumption.

So we FLEX explored aspects of spatial filtering, which allows for awareness of

neighbours without intrusion. In the context of the home dwelling, this could include stable-doors that afford protection and territorial layering for the body, restricting access but enabling the outside environment to enter partially. Porches (both the British shelter and the American platform) are halfway spaces and act to blur the distinction between inside and outside, especially those with glazed sides. This indicates the scope for further investigation into new and more porous boundary devices.

How might boundaries be breached in more subtle ways? Sometimes it takes someone to facilitate the sharing of space: to establish cosy spots to gather, to set times to encounter others and create an atmosphere that will support conversation between relative strangers. Sometimes the simplest way of getting people to talk is to talk to them.

Participants suggested that opportunities to share on a number of different levels - material, cultural, social, practical, convivial - could be provoked, designing these into our homes and neighbourhoods and our ways of being together. Obstacles include fear of embarrassment, intrusion and vulnerability to harshness at the hands of others, all of which can become more pronounced as people age. Braver souls often lead the way and create an atmosphere where others can follow suit. Even understanding these dynamics can assist communities in working together to overcome fear and put in appropriate safeguards.

While there are basic requirements in making a home better suited to independent living as we age, our participants suggested that it isn't so much the internal layout that requires thought regarding flexibility and flexible living, as the external walls and the spaces and boundaries beyond, countering a

tendency, however unintentional, to design elderly dwellings that are sealed from their environs. This may particularly be an issue in private care homes in remote or peripheral locations, but is a broader tendency. It is supported by trends in environmentally aware and secure living, both of which tend to seal off sources of access.

FLEX identified a number of actions that can be taken at household, community and policy level to improve wellbeing through conviviality as we age:

- Make people aware of what they already share and how important it is to the neighbourhood and their own wellbeing.
- Explore the sharing of new experiences, resources and knowledge across whole locales and particularly across generations.
- Look at safe ways that sensual and social awareness of others might be managed, such as opening a window, building a porch, sharing a meal, holding a street barbeque.
- Provide comfortable and vibrant environments to talk about needs and opportunities in addressing our shared futures, using a convivial model to inspire emulation.
- Open up discussion of positive future ageing through convivial local workshops that engage individuals across all generations, including children.
- Consider ageing as a universal 'me' not 'them' challenge, as well as a social, physical and emotional stage in life.
- Ask what a community of elders would

be like in a particular neighbourhood or to tackle a local challenge.

- Look at the ebb and flow of space around the 'wider home' and how alternative arrangements – enforced or chosen – have a lifespan.
- Plan for next steps beyond and outside the home as well as within the boundaries of individuals' property.
- Think about the design of in-between spaces – how small modifications in décor and timings might a more flexible and 'porous' environment.
- Make people's experiments and successes with alternative living arrangements easier for others to find and provide guidance for how to manage the related ownership issues.

Quotes:

"We talked about sharing pets. My dog is actually quite a focus for sharing conversation or time. I'm very lucky that I live in an area with lots of cycleways around it, and everybody's walking their dogs."

"I had ordered a pizza from the take-away, but there was a mix up and I got two pizzas instead of one. I said to Steve, 'Give that to Andy', and he's, 'Oh no, no, no, no'. So I just went and knocked on Andy's door, and he happened to be in and he came out and I said, 'Would you like this pizza? The pizzeria has given us this free. Do you like pepperoni?' he said, 'I do now', and two days later, he said, 'Oh, that was great, I really enjoyed my pizza'."

"Generosity of spirit encourages people to communicate better. But it almost always takes the odd eccentric in a group to start the ball rolling. You have to be a bit batty to do it - cheeky, a bit pushy. I believe that if you take that first step people will be grateful. Take the risk, because in all sorts of ways we're really becoming such a risk averse society, aren't we?" ■



Chapter 18

RESISTANT SITTING

By Sophie Handler (for Ageing Facilities)

Introduction of Research

Resistant Sitting is a project about the creative appropriation of generic streetscape objects as temporary sitting spots (where standard public provision for sitting is lacking).

Who Are The Team?

Conceived by Ageing Facilities, Resistant Sitting is a project developed in collaboration with older residents across Newham, East London.

Set up and managed by Sophie Handler, Ageing Facilities is a practice-led research initiative exploring different ways of ‘making space’ for older age. Using live projects, fantasy proposals and critical research, Ageing Facilities tests out

alternative ways of imagining and using the urban environment in older age. All projects are structured in a way that work with, by or for older people in some form.

Who Is The Community?

A local community of older residents in the London Borough of Newham, based around the Ascension Church lunch club in Canning Town (a social club for older residents that meets once a week in the local church).

How Did It Start?

The project started from a chance conversation with Joan (a regular attendee at the Ascension Church lunch club - one

of Newham's 'warm zones' for older residents). Her passing remark about stopping to sit on the low wall outside no. 139 on the Regents Park Road (on her way to collect her weekly pension at the Post Office) led to a broader set of questions and observations around older people's tactics and techniques in finding ad hoc rest stops when out-and-about.*

- The everyday practice of using existing features of the street (a low wall) as appropriated seats;
- The close familiarity with features of the street that identifies a particular (low) wall (outside no. 139) as sittable;
- The hesitancy too in using spaces and objects not formally designed or 'read' as a seat for sitting on;
- And the hesitancy too in borrowing the ostensibly private space of a residential boundary wall ('what would the residents of 139 say if everyone sat on their wall?);

These observations and questions led, in turn, to a broader practice-led research project that made up the Resistant Sitting project: mapping out those ordinary features of the street that older people already use where public provision for seating is lacking.

City/Country & Timeline

- London Borough of Newham, East London (2008)

Addressing Issue(s)

Ostensibly, the project addresses those familiar 'age-related' issues surrounding the problematic shortage of benches and other forms of 'public rest stops'. This shortage of publicly-available seating can, as in this project, be taken as symbolic of the literal challenges that older people face in getting out and about in so-called 'resistant' or obstructive urban environments.

But in documenting those 'infra-ordinary' sitting spots that older people already use when out-and-about this project sets out to highlight those existing tactics and techniques – the adaptive actions – that older people already use everyday to navigate and adapt the streetscape as their own. This might be seen as, variously: resourceful action, tactical, resistant of an obstructive urban environment in some form – or as a kind of commonplace ingenuity – making use of what already exists. Here, through the Resistant Sitting project, these adaptive actions are amplified: turned into a form of design practice and possible modes of intervention.

* These initial conversations with Joan took place as part of broader pseudo-ethnographic research project: an 8-month long participative research process exploring the spatiality of ageing in the London Borough of Newham. See: *The Fluid Pavement and Other Stories on Growing Old in Newham* (2006).

Beyond conventional design preoccupations that focus on the construction of ‘ideal-type’ seating (conforming to ergonomic Sit-to-Stand measures etc.) this project looks instead at how older people already make use of urban space to see how a new generation approach to ‘public seating’ might be developed out of these existing tactics and techniques.

Based on the principles of retrofitting, small change, identifying what already exists and building on these, the role of the designer (or creative urban practitioner) here involves both identifying and making visible these less visible urban tactics and techniques and building on these to develop alternative proposals.

Project Organisation

The project involved an extended collaborative research process: identifying and mapping out the exact co-ordinates of those ‘infra-ordinary’ sitting spots together with members of the Ascension Church lunch club (an exercise in collective mapping).

Based on a series of conversations held in the lunch club over the course of 2009, the project literally marked out these ‘infra-ordinary’ sitting spots onto a map of the borough (low walls in Canning Town, bollards on Upton Lane, supermarket shelving in the Stratford Mall, a borrowed chair on a market shoe stall).

This process of mapping was facilitated by different props used as conversational prompts to stimulate discussion: the to-scale reproduction of a section of Joan’s low wall, for instance, as something to talk over while debating the relative merits of different seating types. A partnered walking tour of the borough’s alternative seats meanwhile

(walking and sitting with Eileen), became an opportunity, in turn, to test out the ‘sittability’ of different ‘seat’ types.

That process of conversational mapping combined with the partnered on-site tour of these alternative sitting spots was then translated into a systematic survey of these sitting spots (via photography, on-site measuring, to-scale drawing of defined seat features). This resulted in a typology of seating types that were then systematically catalogued and mapped out into An Alternative Street Furniture Guide of the borough’s hidden sitting spots.

What Happened? Design Solutions

The project design ‘solutions’ involved two elements:

- 1) The final ‘designed product’ involves the identification and detailed mapping out of these alternative sitting spots (bollards, low walls, empty stretches of supermarket shelving).

Following the visual style of a local authority street furniture manual, these alternative seats have been given formal design value as each bollard, low wall is systematically photographed, measured and defined through its advantageous features (as defined by its users).

The design solution here is, in part, a symbolic statement on the need to give value to informal practices, tactics and techniques that make use of what already exists.

As a mapped-out survey, though, of ‘infra-ordinary seats’, the project also functions on a pragmatic level. The survey, reproduced as a borough-wide guide to ‘alternative sitting spots’ (for local pensioners) is made available

for local use. In this sense, the function of the project is to make these seats visible to others- making them available as public-use facilities across the borough.

2) A second, add-on stage to the project involves an artists' commission based on a closely-defined artists' brief: to amplify and make more comfortable one of these alternative sitting spots.

Based, again on the principle of the bare minimum intervention (making use of what already exists), this brief calls for the production of a lightweight, portable, pull-on pull-off cushion made-to-measure the dimensions of the standard Abacus roadside bollard (one of the alternative sitting spots identified in the guide - that appears, serially, on the roadsides of Newham across the borough).

Produced as an alternative to generic aids for older adults this bespoke cushion aims to both formalise and enable the ad hoc re-appropriation of the generic street. (Available as a reversible fair and wet-weather cushion - with min. 300mm padding). This portable cushion is an Ageing Facilities commission realised by artist Verity Jane Keefe and produced in close collaboration with bollard-sitter Eileen. ■

Chapter 19

COMMUNITIES AND COMMUNICATION: SOCIALY INCLUSIVE DESIGN ACROSS THE AGE SPECTRUM

By Rama Gheerawo and Chris McGinley

Introduction

This section covers twelve projects completed over the last decade by The Helen Hamlyn Centre for Design (HHCD) at the Royal College of Art (RCA) in partnership with BlackBerry, a global leader in wireless innovations. Seven design research projects

and five community-based Masters student projects were run with people of all ages living in the UK. The work brought together an academic design institution, an industry partner and age-diverse community groups to use their collective creativity and

ingenuity to look at barriers, challenges and opportunities in the digital space.

The work forms part of over 180 socially inclusive design projects conducted by the Centre and builds on some of the core research interests of its Age & Ability Research Lab - technology, community, co-creation. The Lab is Lead by Rama Gheerawo, RCA Reader in Inclusive Design and the Centre's Deputy Director, and is supported by Dr Chris McGinley, Senior Research Associate. The HHCD was co-founded by Prof. Roger Coleman and Prof. Jeremy Myerson, the current Director.

Who is the Team?

Project Leader: Rama Gheerawo

Senior Design Researcher: Dr. Chris McGinley

Design Researchers: Maja Kecman, Cian Plumbe, Yusuf Muhammad, Clara Gaggero, Catherine Greene, Lisa Johansson, Gianpaolo Fusari, Chris McGinley, Cristina Gorzanelli, Kiyoko Toriumi

Designers: Approximately 100 Students from the following RCA programmes: Design Products, Fashion, Information Experience Design, Innovation Design Engineering, Service Design, Textiles, Vehicle Design, and Visual Communication.

Who is the Community?

A broad range of communities throughout London were involved in the projects, including:

- Hackney Stream: A Digital Community Group for Hackney Residents aged 50+
- Progress: A Gardening Group for People Age 2 to 92 Based in Lambeth
- Caribbean Hindu Cultural Society: A Society of Older Adults Supporting and Practising Hinduism
- West Norwood Feast: A Monthly Food & Arts Market, Organised by Local Residents
- Brixton Society: A Society Promoting the Heritage of Brixton
- New Horizons: A Multi-Activity Centre for Older People
- Claremont Project: A Day Centre and Meeting Place for Age 55+
- Cressingham Gardens: A Housing Estate of 300 Homes with Diverse Residents
- Kentish Town City Farm: A City Farm Maintained by Volunteers
- The Kindness Offensive: Network of Volunteers Who Perform Random Acts of Kindness
- Marchmont Community Centre: A Centre Improving Quality of Life for Local Youth & Elder Residents
- Safer Travel Team: A Group within Camden Council Developing Street Policy & Public Safety

How Did it Start?

This work began in 2005 in response to the following drivers - digital exclusion of older people, increasing market opportunities in the technology sector, evolving inclusive design beyond a focus on products and environment, and developing design research methods to work with communities as well as individuals. At

that time, inclusive design had focused primarily on the built environment or the design of physical objects. It also had an emphasis on accessibility and capability. Adapting and evolving current inclusive design methods to create more people-centred and mainstream digital technologies was a key challenge.

Create people-centred digital technologies.

The partnership developed from a conversation between Rama Gheerawo and BlackBerry in 2005, a time before apps, WiFi, cloud computing, smartphones and touch screens became everyday experiences. Digital exclusion due to age was the starting point and a signature part of each project was the two or three word briefs that allowed the designers to go on a journey, to interpret a broad concept in their own way and not dive straight in with a results-orientated approach. Rather than be singly driven by technological advancements, each project considered a topical social issue, responding to people's perspectives and aspirations.

Addressing Issue(s)

Over the last decade, digital technologies have become a dominant part of the consumer experience, influencing every area of design from artefact to architecture. The rapid growth in the number of digital devices, interfaces and services shows the significance of technology and the aspirational value that it can hold for people. We live in a world where the digital and physical not just co-

exist but intertwine. In particular, areas such as communications, information and entertainment, are becoming less bespoke, more convergent and more pervasive in both personal and professional lives (Woods, 2003). Those who are digitally disenfranchised (the Government Digital Service estimate this to be 18% of the UK) can miss out on savings through online shopping discounts, travel deals, better job prospects and even increased earning potential according to Martha Lane Fox, The UK government's digital champion (The Telegraph, 2009). Older people can form a significant part of this group.

By 2020, close to half the adult population of Europe will be over 50 (Coleman, 1993), and one third of the inhabitants of the United States will be over 55 (Mueller, 2003). Population ageing is a demonstrable phenomenon resulting in a body of older consumers who demand more from technology and are less accepting of its shortcomings. In particular, the baby boomers will want to continue to use digital services well into later life to maintain their social circle and support their communication needs (Newell, 2003). They demand active participation within society, and want to live independent, vibrant lifestyles that are different from the institutionalised thinking that has been prevalent for most of the last century (Coleman et al, 1997).

The physical effects of getting older involve multiple, minor impairments affecting eyesight, hearing, dexterity, mobility and memory (Haigh, 1993). Devices and services that are hard to use, or difficult to access do not satisfy the needs of older people and this has significant implications for design that is mismatched to functional ability (Laslett, 1998). However, design for older people should go beyond physical requirements

to also address personal aspiration and emotional connection, something that people continue to value as they get older (Audit Commission, 2000).

This is very much aligned to the thinking contained within inclusive design, defined as comprehensive, integrated design that encompasses consumers of diverse age and capability in a wide range of contexts (BSI, 2005). Designs should be ‘age inclusive’ rather than ‘age exclusive’ as few older people will want to buy a technology product or service that singles them out due to age. They have contemporary expectations, control significant amounts of disposable income and are valuable participants in the economy and the community.

Project Organisation

Involving people throughout the development of digital products and services is generally not prevalent in the commercial environment. Our projects worked with participants throughout the design development process, demonstrating the value of the inclusive design approach both creatively and corporately.

The research projects were part of The Helen Hamlyn Centre for Design’s Research Associates programme that teams RCA design graduates with industry, government or voluntary sector organisations to work on year-long design research projects. BlackBerry is currently the longest-running industry partner on the programme. Each designer researcher was trained in a range of research techniques including questionnaires, workshops, expert consultation, diaries, interviews, observation, design probes and research kits.

Some new and novel methods were developed to respond to challenges of working in the digital space. For example, some older people did not respond well to digital acronyms and jargon such as WiFi, SMS or 3G. Design Provocations, where props, sketches or visuals are shown to people to stimulate feedback and provoke response (Eikhaug et al, 2010), was evolved as a method to enable participants to articulate their own ideas and describe benefits to digital engagement.

In 2010, Royal College of Art Masters students were brought into the research project to add a further creative dimension. This was typically run as an eight-week programme of academic learning with prizes to reward the best ideas and an exhibition held every year as part of the London Design Festival to disseminate the ideas.

All designers worked with users and communities and have talked to gardening communities, grandparents, isolated home workers, visually impaired teenagers, food lovers and busy sales staff to name a few. The year follows four stages of the double-diamond process as defined by the UK Design Council (2005). Each stage is convergent or divergent depending on whether it is about ‘blue-sky thinking’ or focusing ideas. Typical activities in each phase were:

Discover phase (divergent): exploration of brief and hypothesis, contextual research and definition of project participants or communities.

Define phase (convergent): designing and conducting design ethnography. People-centred design briefs defined from the research insights.

Develop phase (divergent): development of a number of ideas through co-creation and design ideation processes.

Deliver phase (convergent): selection of ideas to take forward and delivery of outputs in the form of prototypes, services ideas or guidance.

What Happened? Design Solutions

Many of the design ideas anticipated mainstream digital ideas round WiFi use, location-based apps, geo-tagging, cloud computing and social networking. The work mapped a shift in the way inclusive design was being applied – people were not just seen as the subject of research, but involved as authors of their own solutions. This democratisation of design does not herald the death of the designer.

Instead it evolves their role, asks them to be more responsive to the world around them and to share creative leadership. This type of inclusive digital design sees people as central to the design process, as participants, as commentators, evaluators and even instigators (Gheerawo et al, 2011).

**This
democratisation
of design does not
herald the death of
the designer.**

Research Projects:

2005-2006:

Generation Game: Making WiFi Devices More Inclusive

This project looked at how emerging wireless technologies could help communication between members of the multi-generational family, even mediating family differences. Insights included a tendency for family communication to be reliant on a 'hub' member, usually the mother.

Design concepts therefore built around a technology 'hub' allowing family members to use WiFi to communicate through it using the device best suited to each. For example the mother might send a single message that the father receives as e-mail, a tune plays on a toy for the six year old, a 'ping' secretly alerts the teenage daughter so she is not embarrassed in front of her friends, whilst a printed message is created for the grandmother on her device.

2007-2008:

Seamless Mobility: Designing for Work-Life Blend

This looked at how technology can create a better work-life 'blend' for mobile urban dwellers. Seven knowledge workers participated in the research, and methods included visits to their homes and workplaces, informal interviews and research kits to record activities and aspirations.

A recurring desire was to 'take their world with them' allowing unfamiliar spaces to become familiar. Seven new service applications resulted. Two were: 'BlackBox' holds a person's preferences on their device to reconfigure a hotel room to feel like their



living room; 'PeerSteer' bookmarks places on a map so recommendations can be exchanged with friends.

2008-2009:

Alternative View: Developing Smart Phones with Low Vision Communities

This work examined how people with reduced sight use smart phones, and explored device designs based on eyes-free operation. Inclusive design research was carried out with people aged over-65 and under-25 to compare and contrast their perspectives.

Design concepts supplemented sight with other sensory input. 'Sense Profile' comprised an Audio Slider, Visual Slider and Tactile Slider on the phone screen. Moving the Visual Slider up progressively makes the font size bigger, icons larger and contrast greater, removing the need to change multiple settings buried in the software.

2009-2010:

Fashioning Technology: The Social Impact of Mobile Communication

The research focused on evolving digital etiquette to manage the constant stream of communication from mobile devices. A user group of 15 people - ranging from teenagers to older workers and from phone addicts to technophobes - were interviewed and shadowed to see how they dealt with unexpected calls and interruptions.

SmartCall enhances voice calls by communicating the reason for the call, the urgency and the timeframe for response when the phone rings. SkinDisplay allows raised lettering to appear on the back of the phone, containing the caller's identity or the reason for the call. By pressing fingers to the phone, words are imprinted on a person's hand.



2010-11:

Talking People: Reshaping Community and Communication

30 Masters students from the Royal College of Art also worked on design ideas as part of the project over two weeks. The brief looked at how digital technologies and services could be placed around the body or embedded in everyday artefacts. Some of the seven resulting design projects are listed below:

sur.face is a textile that has display and video capture elements embedded in it. It takes video calling away from the laptop screen so pillows or cushions can become tactile screens to talk to loved ones. BlackBerry Aid uses a toothbrush to collect health data, helping people become more active in maintaining their health and well-being. Information is relayed in a way that informs rather than intimidates.

The project explored how digital technology can help people in local communities come

together and increase opportunity for social exchange.

This was explored from digital and physical perspectives starting with desk research, expert interviews and site visits. Local shopkeepers and residents were then interviewed on two London high streets.

The study identified a digital divide between online and offline communities of users within a local area and explored ideas such as digitally enabled community notice boards to close the gap.

The Student Programme

A month-long engagement took place with 20 RCA Masters students to develop design proposals based on research with over 140 people. The brief was to understand how digital technologies could help individuals in communities better communicate with each other.



The ideas generated highlighted the importance of designing for community rather than just focusing on the individual when looking at the digital space. Examples include 'Boss On Demand' an online service that supports isolated homeworkers by recreating office culture. Different virtual bosses such as 'Mrs Finger Snapper' help to motivate or discipline, and Christmas parties can be organised locally with fellow home workers at the neighbourhood cafe.

2011-2012:

Belonging and Becoming: Older People, Technology & Community

This project looked to understand how digital technology can enable older people to become a more vibrant, visible and vital part of their community. It built on the World Health Organisation's definition of Active Ageing that has three components: being, belonging and becoming.

Workshops, community visits and home interviews probed the barriers as well as aspirations that older people have within their communities. Discovering local activities was important. 'What Am I Missing' is an app that provides new recommendations for activities and places in the local area depending on a person's previous searches. The Student Programme

16 RCA masters added a creative phase working to the brief of 'how can digital technology help older people become more vibrant, visible and active within their communities?' Five older people joined the teams to lend their life expertise to the research and to co-create ideas. Each person belonged to a London community, ranging from a computer club to a religious society.

Resulting designs concepts included 'Radio+' that built on conventional radio formats to enable older people to digitally record, upload and broadcast up to 30 minutes about anything that interested them.



2012-2013:

Cultural Interfaces: Strengthening Community Interaction

This project investigated how digital innovation can enhance neighbourhood activities in a range of age-diverse cultural settings. 'Culture' was examined through the lens of the 'neighbourhood' focusing on two aspects - location (such as community centres) and activities (such as gardening).

Key insights included observations such as a community culture is not created by a top-down structure in today's digitally connected world. Local people, places and activities drive the 'flavour' and help to define a neighbourhood.

The Student Programme

24 RCA students were paired with five London community groups in a co-creation

process to gather insights and create design proposals over eight weeks. Their brief looked at how digital technology could address a community's cultural activities, aspirations and attitudes.

The growing appetite for citizen-generated content was highlighted. One of the outputs generated in partnership with Progress, a gardening organisation for people aged 2 to 92, was 'Patchwork Progress'. This digital patchwork grows as the community gets busy gardening. It uploaded and shared activities from across the network to interfaces in community centres and bus shelters.

2013-2014:

Connected Kindness: Using Digital Technology to Create Trust

This work investigated the digital possibilities for enabling people to help and share with others, whilst building empathy, trust and

connection. The study looked in particular at how to encourage generosity between people, enabling platforms for exchange, bartering or simple support.

The project built on the emerging context of social innovation, highlighting aspects such as the potential for digital technology to enhance group connectedness, engender trust between strangers and link individual efforts for the greater good.

The Student Programme

22 RCA Masters students from the Service Design, Information Experience Design and Visual Communication departments took part. The brief looked at the notion of 'connected kindness', concentrating on generosity in three themes: 'living', 'moving' and 'connecting'.

One resulting project 'Goodwill Journeys' explored safer travel through community engagement. This received further funding for development into a volunteer service that connects people across the generations around street issues. Membership includes personalised tech tweaks such as longer crossing times at problematic crossings for older people.

Project Timeline

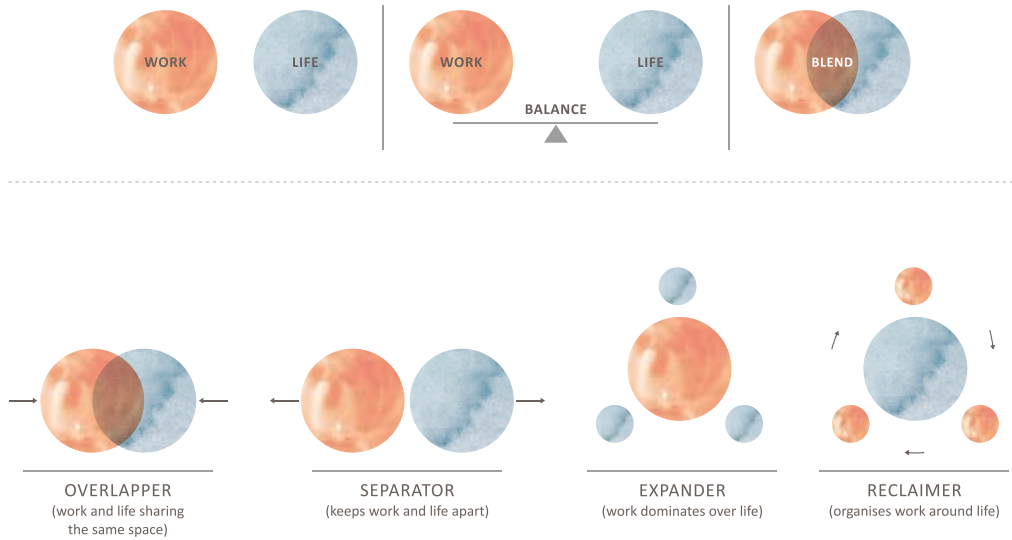
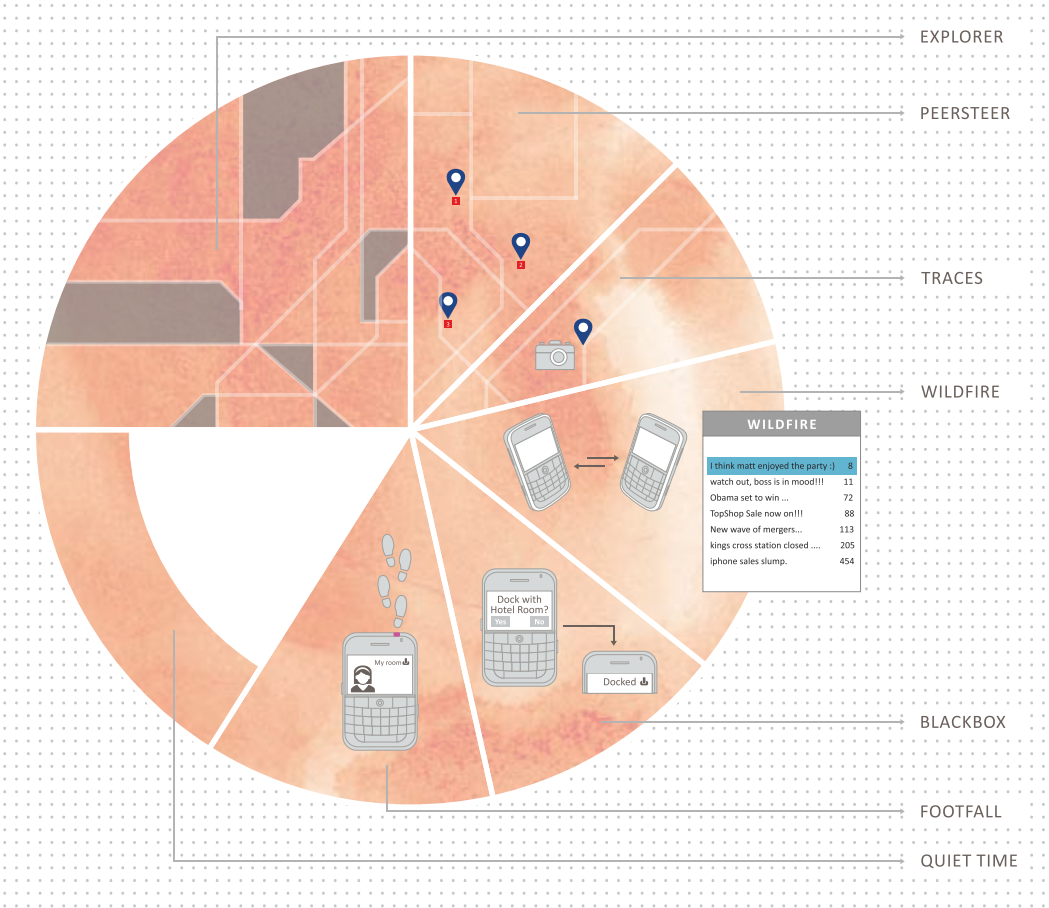
Since 2006 these series of projects have been conducted by the Helen Hamlyn Centre for Design based in the Royal College of Art, in partnership with BlackBerry. They have explored the potential for communication innovation through an inclusive people-centred approach:

- 2006 Generation Game
 - 2008 Seamless Mobility
 - 2009 Alternative
 - 2010 Fashioning Technology
 - 2011 Talking people
 - 2012 Belonging and becoming
 - 2013 Cultural interfaces
 - 2014 Connected kindness
-



Using Wi-Fi to connect family members of all ages

2008 Seamless Mobility



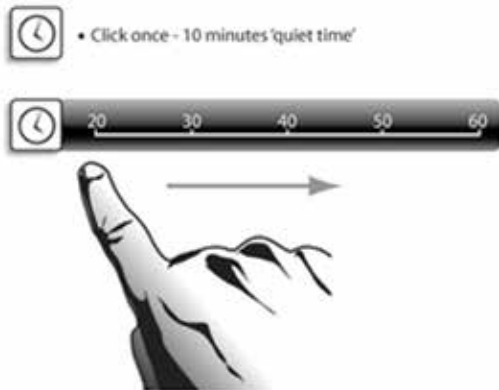
2008 Seamless Mobility (continued)



Black Box: brings aspects of your life together in one place



Footfall: gives an ambient presence of a loved one

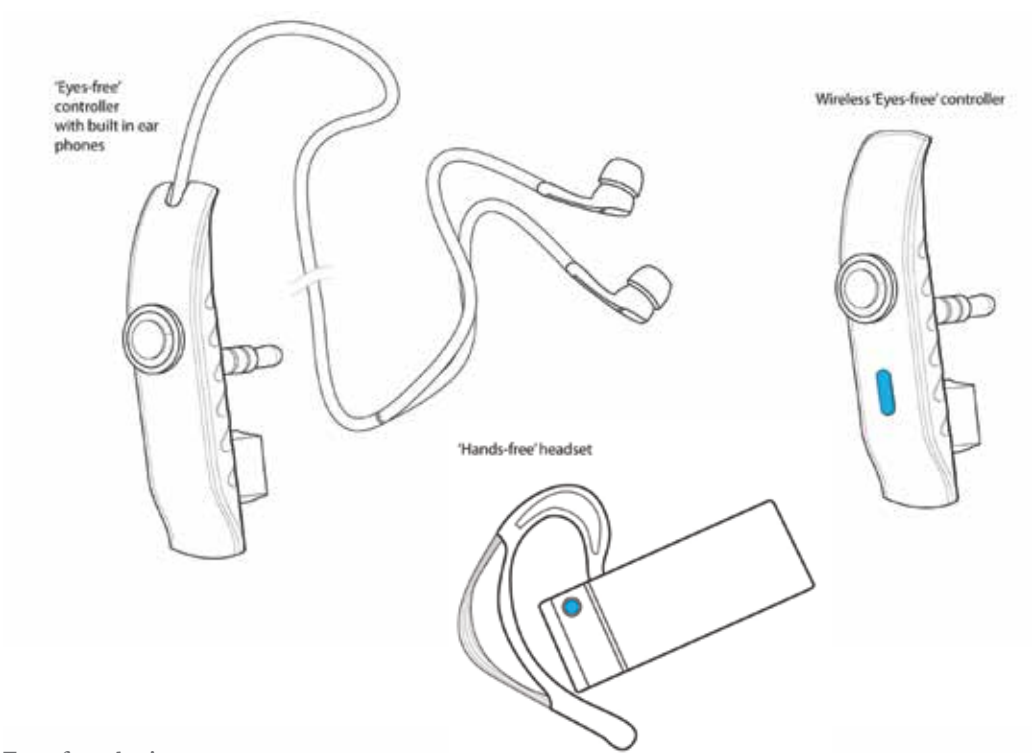


• Click and hold - to set duration of 'quiet time'

Quiet Time: different ways to switch off



2009 Alternative View

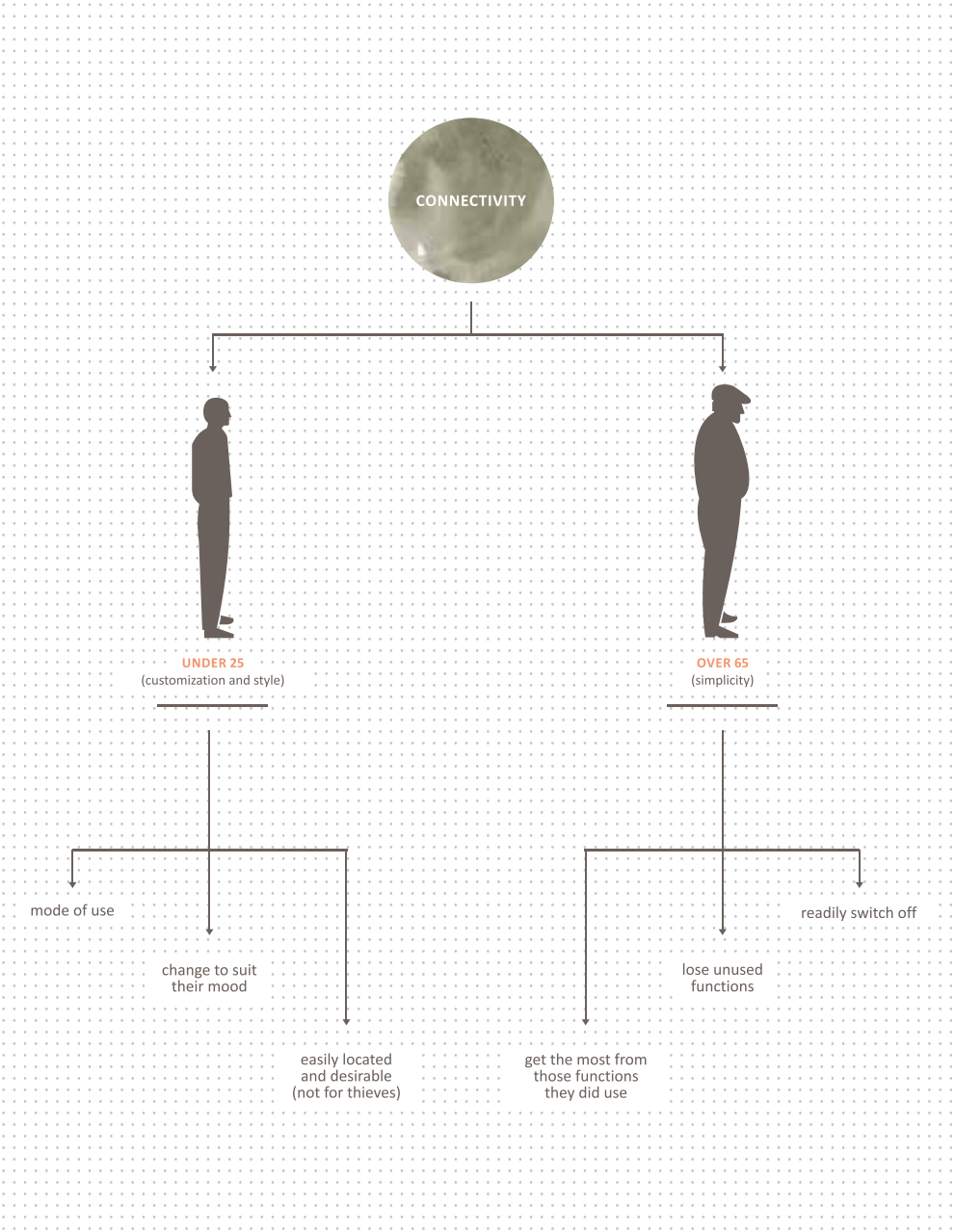


Eyes free devices



A eyes-free controller

2009 Alternative View (continued)



Under-25s and Over-65s in the study

2010 Fashioning Technology



Aid



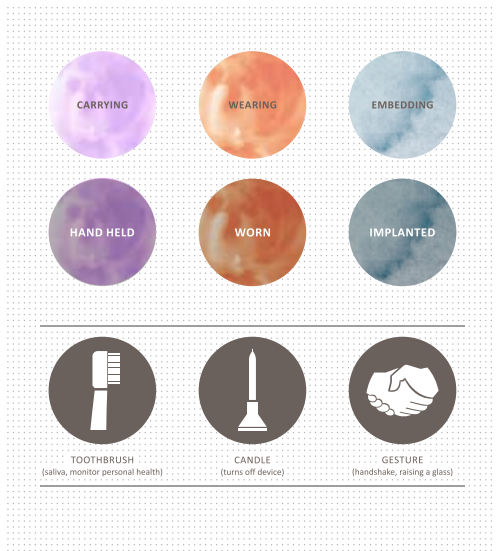
Loop



PenPen



Sur face



Project Framework



Candle

2010 Fashioning Technology (continued)



dStamp



White Feast



BlackBox Touch



2011 Talking People

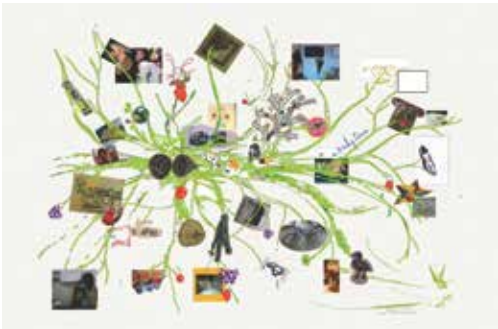


Boss on demand



Drawn to the table

2011 Talking People (continued)



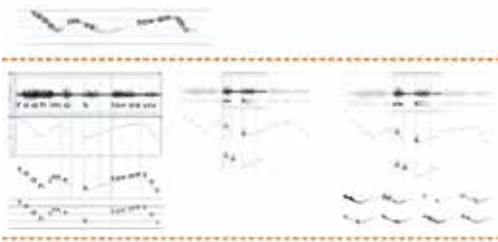
The garden



Communitree



Translating Voice to Text



Runabout

2011 Talking People (continued)



High Street Context



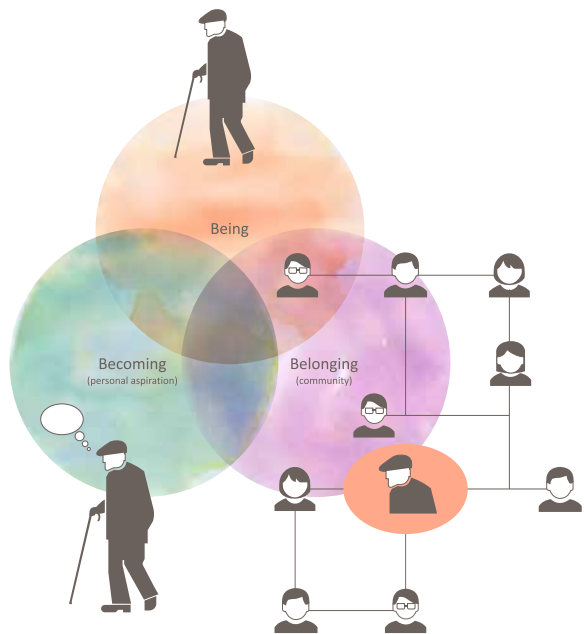
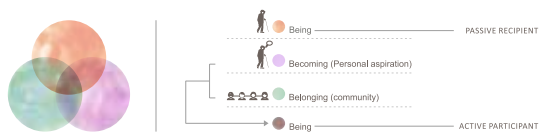
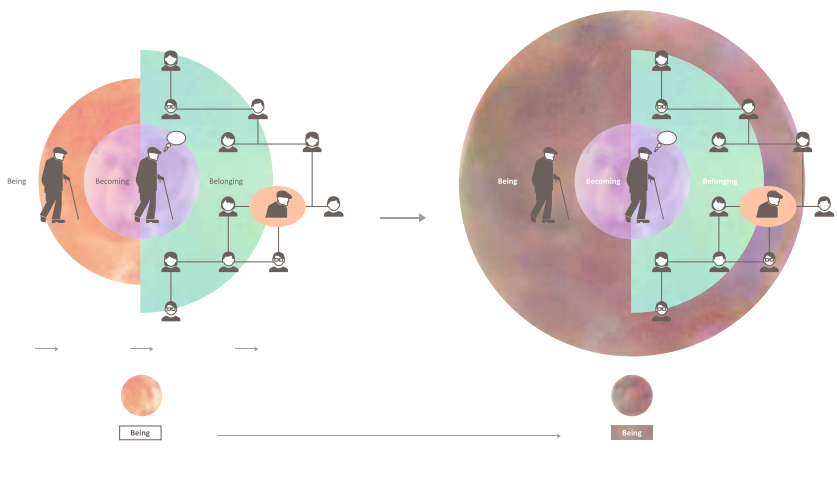
Research context in London



Digital Community Board



2012 Belonging and Becoming



World Health Organisation's three aspects of ageing

2012 Belonging and Becoming (continued)



Landcare



Day Tripper



Radio+



Memory Capsule



Story Walk

2013 Cultural Interfaces



Indpendaid

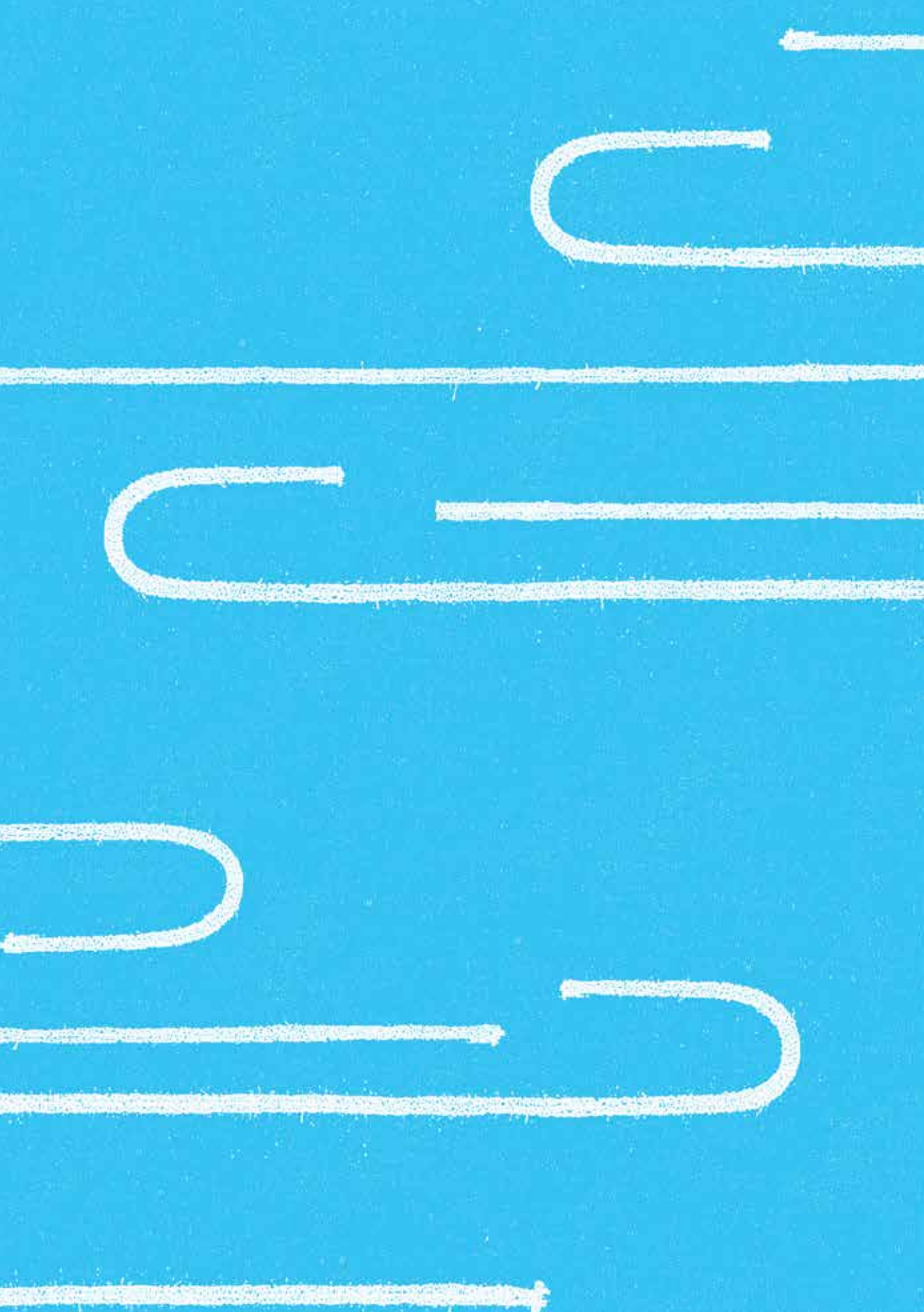


2014 Connected Kindness



2014 Connected Kindness (continued)







PART III:

NEXT STEP— INTERNATIONAL FUTURE

Chapter 20

AGEING DESIRES: DESIGNING FOR TRANSITION

By Mariana Amatullo & Helen Cahng

Introduction of Research Team

Art Center College of Design

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Designmatters Department
Elisa Ruffino, Director, Designmatters
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Tama Art University

Tatsuya Wada, Product Design Department
Chair
Ms. Saori Takenaka, International Exchange
Section Professor

Masayuki Yamamoto, Graphic Design
Department Professor
Mayu Yoshikawa, Textile Design Department
Professor
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Dianne Kujubu Belli, Chief Administrative Officer and Executive Director, The Institute for Healthy Ageing at Keiro
Aaron Hagedorn, PhD, Assistant Clinical Professor, University of Southern California, Davis, School of Gerontology
Alexis Denton, Doctoral Student, M. Arch, LEED AP, University of Southern California, Davis, School of Gerontology
Gwen C. Uman, RN, PhD, Partner, Vital Research
The Honorable Mr. Junichi Ihara, Consul General, Consulate of Japan, Los Angeles
Mr. Makoto Hirose, Consul, Consulate of Japan, Los Angeles
Special participation of Ms. Akiko Aagishi

How Did It Start

The collaboration between Art Center and Tokyo's Tama Art University reaches back to the early 1980s, when a group of exchange students from Tama came to Art Center. The exchange of students continued over the years, and in 2006, the Pacific Rim joint project was launched as an annual

collaboration between both institutions. The project required design students of the two institutions to collaborate on research and practical work related to both global and local themes such as natural disasters, sustainability and workspace.

Ageing Desires is the sixth international studio addressing the common problem of an ageing society and how to successfully respond to the needs and desires of an ageing generation. The investigation was facilitated by Designmatters, Art Center's social impact Department.

This "greying" of the Baby Boom generation is inevitable

City/Country Timeline

- This transdisciplinary studio took place at Art Center College of Design, Pasadena, California (USA) in the fall 2010 semester, with the participation of students and faculty from Art Center and Tama University, Tokyo, Japan.

Addressing Issue(s)

By 2015, one in every five Americans will be between the ages of 50 and 64. By 2030, these numbers will double to more than 71 million. This "greying" of the Baby Boom generation is inevitable. With each new year, Boomers—78 million children born the two decades after World War II—move closer to retirement age and toward numerous related

health issues ranging from Alzheimer's to proper nutrition.

In Japan, older people are now outnumbering children for the first time. There are 19.54 million Japanese over the age of 65, while those under 15 number just 19.49 million. While every industrialized country faces this problem, Japan's situation is by far the most severe. Japan currently has fewer than half the workers per retiree that it had in 1997—a mere 2.5 people of working age for every pensioner. It is likely that in the early 21st century, Japan will have fewer than two people at work for every retiree.

Project Organisation

The goal for this trans-disciplinary studio was to create design interventions focused on the realm of healthy ageing. Students worked in teams to develop environments created to improve the quality of life for this ageing generation in both Japan and the U.S. Examining a wide range of social issues, students envisioned solutions for healthy living, both at home and in assisted care living facilities, designing with an eye to the future.

Key to the design process was for students to spend time researching both cultures, addressing the different social and health issues involved, and being exposed to opportunities to conduct first-hand research with this population and forecast trends for healthy ageing. Designmatters facilitated access for the teams to do field research and visit a spectrum of facilities, which included the Keiro Senior HealthCare Center, the largest non-profit healthcare organization serving the Japanese-American community in Southern California.

"Add life to their years"

A Designmatters panel with experts from Keiro, the USC Davis School of Gerontology, and Vital Research, a leading consultancy that provides survey development and statistical analysis for ageing, was key in anchoring the issues the class would tackle.

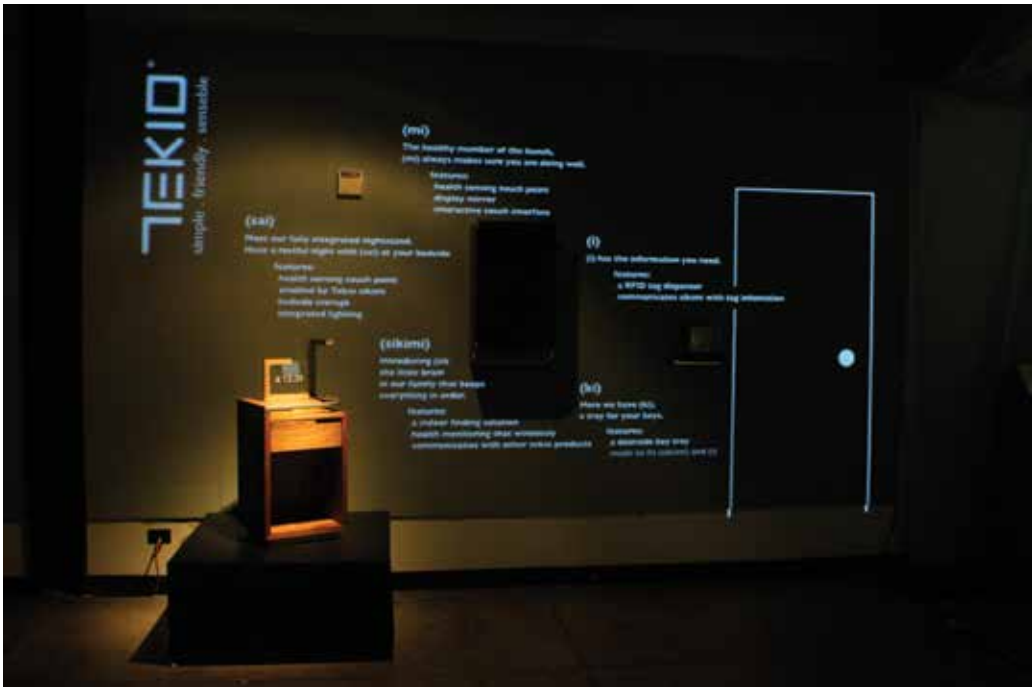
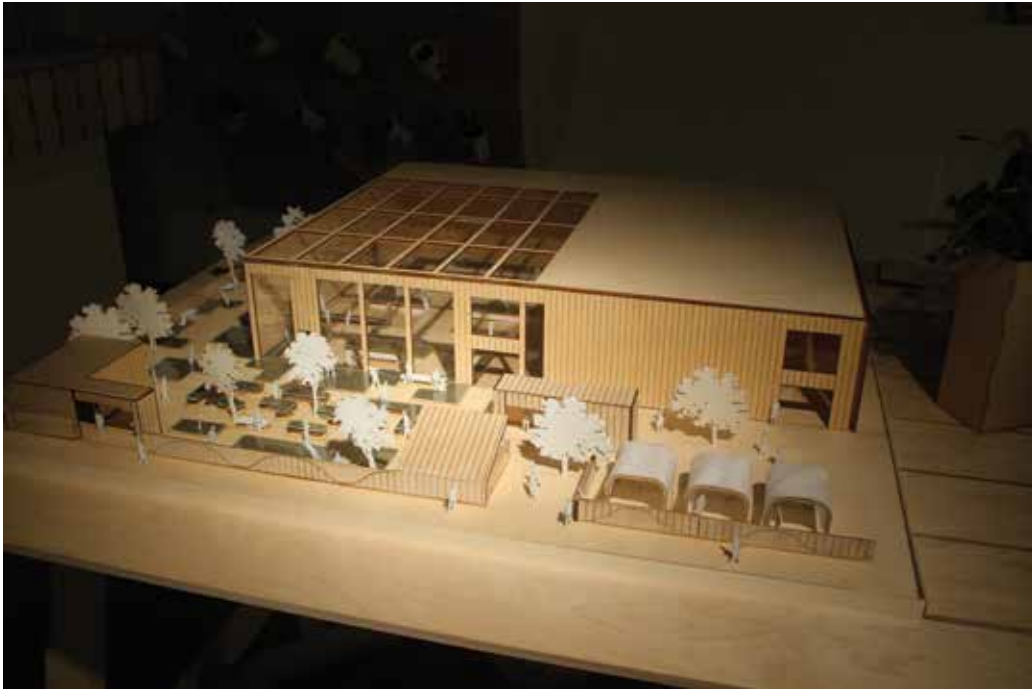
The panel discussion offered an overview about the wide range of social issues, desires, barriers and fears as we age and touched upon trends in the environmental gerontology and technological innovation in ageing that will enable older adults to “add life to their years,” in the words of Dr. Aaron Hagedorn.

What Happened?

Students set out to create innovative design solutions to improve the quality of life for this ageing generation. The projects share a common aspiration to broaden older adults' participation in the community and reach self-actualization at the end of life. Following are the four outcomes:

TEKIO:

Tekio means “adapt.” The idea behind Tekio was that Boomers would be happier—and healthier—if they can age in the comfort of their own homes. With this in mind, the team created a modular, functional living space with minimal parts that could easily accommodate the ageing process. Utilising intuitive technology, they created a functional living space focusing on the various short-, mid- and long-term needs of its inhabitants.

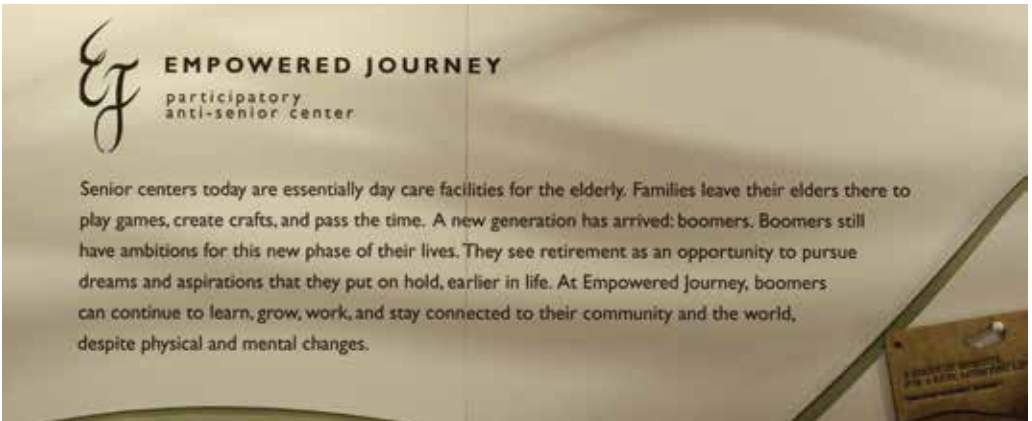




EMPOWERED JOURNEY:

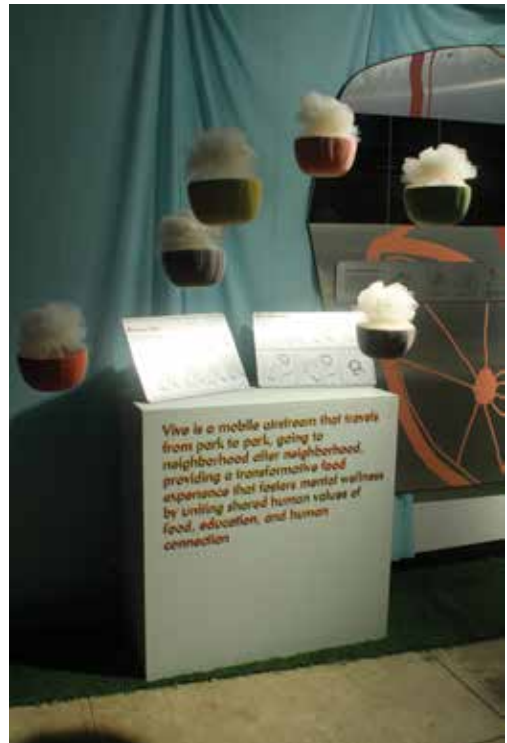
Through research, this team learned that, unlike earlier generations, Boomers still have many personal aspirations beyond retirement. Therefore, the approach they took was to create an abstract, online gathering place, where dreams can still come true through a support network. Empowered Journey is a place that supports the rich and full lives of Baby Boomers and their families. Here they can do various activities, like learn languages or take yoga classes. It's a workshop to learn, a place to create, a marketplace to sell, a location to gather and a site to think and aspire. The website creates a network of support, enabling users to stay connected to their community and the world despite whatever mental and physical challenges they might face.





VIVE:

This team addressed American eating habits, and socialisation in Japanese culture. The response to both? A mobile organic food truck. The truck could provide the Boomers with healthy food, cooking classes, nutritional education, and a chance to socialise with others. Tables, tablecloths and other items would make the experience both fun and social for Boomers, while also helping them live healthy lives.







HARE:

Hare is a general gardening environment created just for Baby Boomers, providing activities such as gardening classes and a farmer's market. The goal was to create a viable community celebrating healthy ageing and quality of life. Students transformed a vacant building into the garden center, creating a regular farmer's market as well numerous gardening-related products and tools. Tools were designed in an ergonomic form, featuring T-shaped handles and straight angles, conducive to the ageing gardener. Classes and workshops on gardening were developed to foster both activity and socialising opportunities. Hare, which means "a special day" in Japanese, also has a website connecting both U.S. and Japanese generations and cultures, offering products and gardening tips and ultimately instilling in users a sense of accomplishment. The group felt gardening together, both physically and online, could create an atmosphere of compassion and understanding in an innovative way. ■





Chapter 21

DESIGNING THE FUTURE

By Brian McMahon

Designers Will Shape Our Future

That future can be shaped to fit ourselves, or it can be a more successful future designed to fit everyone.

Too many times, design comes from inspiration – the random intersections of everyday life that spark ideas. In the hands of team of talented designers, those ideas can become reality. The problem is only then do we learn if they are suitable ideas for everyone to use.

Designing from inspiration is limited to the range of experience of the designer.

The human experience is simply too complex, however, to understand completely.

This complexity is not limited to simple variances in physical attributes (such as age and ability), but also includes cultural influences, regional differences, technology acceptance rates,

the role of brands, vastly varying personal experiences, and hundreds of other influences.

Change also occurs today much faster than ever before. Keeping up with progress in the designer's world of technology, materials, and process is difficult enough .

Once we layer on social, generational, geopolitical, and cultural shifts, all added to the normal churn of fashion and the speed of modern society, the need for current knowledge can be overwhelming.

'Design by Inspiration' is the unfortunate norm however, and many ideas go to prototype (or worse: production) without being sufficiently informed by a wide range of users. User research should be the foundation of the design process. Information from the real world must be sought very early in the process to discover what is not ordinarily available within the designer's own experience. By the time a designer can ask a user 'what do you think of this?' it is far too late to introduce research into the process. In fact, by then it is no longer even considered research - that is testing.

Quality design research supports the very start of the process by providing insightful learning that informs the design. Gathering reactions to an existing idea is useful but it is not enough, and it is rarely inspirational.

Information is the key to successful design. Reliable information gathered thoughtfully and responsibly. Broad information gathered globally. Diverse information gathered from among users of all ages, abilities, cultures, and backgrounds. Authentic information gathered from where people actually live, work, and play. Current information gathered from where trends

We do, after all, live in the Information Age

begin. Inspiring information that sparks ideas, the kind of cross-cultural ideas that resonate around the world.

'Design by Information' is the process that will shape a well-designed and successful future. One that will include, enable, and unify. A future that we as designers can be proud of, one that better serves the entire global community. ■

AUTHORS

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